YELLOWTAIL DAM, MONT.

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HEARINGS

BEFORE THE

SUBCOMMITTEE ON IRRIGATION AND RECLAMATION

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS HOUSE OF REPRESENTATIVES

EIGHTY-THIRD CONGRESS

SECOND SESSION

TO

REVIEW THE AUTHORIZATION OF THE YELLOWTAIL UNIT AND THE HARDIN UNIT OF THE MISSOURI BASIN PROJECT

APRIL 29 AND 30, 1954

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YELLOWTAIL DAM, MONT.

THURSDAY, APRIL 29, 1954

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON IRRIGATION AND RECLAMATION
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10 a. m., in the committee room, New House Office Building, Hon. William H. Harrison (chairman) presiding.

Mr. HARRISON. The committee will come to order.

The committee will take up this morning the problem and proposition of the Yellowtail Dam and will hear witnesses both for and against that proposal.

I understand Mr. D'Ewart would like to make a statement at this time.

Mr. D'EWART. Mr. Chairman, the committee meeting this morning is called at my request for a re-review of the Hardin unit and the Yellowtail unit of the Missouri Basin project, authorized under the 1944 Flood Control Act. This request was made to the chairman pursuant to a consultation with the Department of the Interior, the Director of the Bureau of the Budget, and the chairman of the Subcommittee on Interior Department Appropriations.

It is thought that since the units of the Missouri Basin project were authorized some 10 years ago the technique of engineering has changed very considerably and costs have multiplied, we should have a re-review of the authorization and justification of these projects before they are undertaken. Therefore, after consulting with the Department of the Interior, the Subcommittee on Appropriations on the Interior Department, and also those interested in the project in Montana, we have requested this hearing this morning for a re-review of this project looking toward a request to have it included in the budget for next year. This review will have two purposes: The first, to determine whether there are interests locally sufficient to go forward with the project; and, second, whether there is economic justification for the project.

We have a group of witnesses here this morning, Mr. Chairman and I suggest that first we have the representatives of the Department of the Interior so that they may give the committee a general review of the project as it is contemplated by the Bureau of Reclamation. We have with us Mr. Frank M. Clinton, who is regional director at Billings, and Mr. Walker, regional power manager.

I would suggest both of these gentlemen be called at the same time and be given an opportunity to give us an overall picture as regards the Yellowtail and Hardin units.

Mr. HARRISON. Thank you, Mr. D'Ewart. The first witnesses will be Mr. Clinton and Mr. Walker. Will you come forward and proceed?

STATEMENT OF FRANK M. CLINTON, REGIONAL DIRECTOR, BUREAU OF RECLAMATION, BILLINGS, MONT., ACCOMPANIED BY JOHN R. WALKER, REGIONAL POWER MANAGER, BUREAU OF RECLAMATION, BILLINGS, MONT.

Mr. CLINTON. Mr. Chairman and members of the committee, my name is Frank M. Clinton. I am the regional director for the Bureau of Reclamation for region 6. I was appointed to that position last January.

At your request, I have come to this hearing prepared to explain the factual information on the Yellowtail and Hardin units of the Missouri Basin and to present information on their payout and economic feasibility.

During the presentation of the material I will be assisted in parts of it, particularly the power marketing and power payout, by Mr. Walker.

I have a prepared statement on both units that I would like to file at the end of this presentation. I will take them in the order of the Yellowtail unit first and then the Hardin unit, the Hardin unit being the irrigation unit.

Starting with the Yellowtail unit, it is a multiple-purpose reservoir located upon the Bighorn River about 40 miles southwest of Hardin and about 40 miles airline southeast of Billings, Mont. This unit was authorized by section 9 of the 1944 Flood Control Act.

The primary purposes of the dam and reservoir are irrigation and power and flood control, with sediment control as an incidental purpose. This project has been under investigation for many years. It was first investigated as one of the first units to be looked into after the Reclamation Act was passed in 1902. The Reclamation Service started a survey of a dam site at the lower end of the Bighorn Canyon and a canal system to serve lands on the Hardin Bench in 1903 and wrote a report on it in 1905. At that time they visualized a low dam at the mouth of the canyon that would serve as a diversion structure to deliver water into a canal about a hundred feet above river level.

For various reasons nothing was done toward constructing the project at that time. In 1913 the Bighorn Irrigation & Power Co. was organized and initiated an investigation of a plan similar to that which the Reclamation Service had covered many years before them, with the exception that they considered a high dam instead of a low diversion dam. The dam that they were investigating and surveying at that time was about 480 feet high. It was to serve as a power project and also an irrigation project.

They made surveys of lands downstream and laid out a plan to serve about 60,000 acres. Those studies were completed in 1917, but again their plan failed to materialize into the construction stage.

The project was again investigated in 1931 by the Corps of Engineers as a part of their 308 review of the whole Missouri River Basin. Their review was completed in 1932 and their report was issued.

The Bureau of Reclamation undertook a further study of it in 1939 as a part of an overall reconnaissance survey of the entire Bighorn

River Basin. The purpose of that survey was to outline in general a plan for development of the main stream and its tributaries for the various purposes—irrigation, flood control, and power production. I was personally in charge of that investigation during those 3 years and was largely responsible for the plan that was developed in this lower reach of the canyon, the portion of the Bighorn Canyon between Kane, Wyo., and the mouth down near Hardin.

When those studies were completed we adopted a plan for developing that reach of the river with 2 dams, 1 dam about 143 feet high being a short distance downstream from Kane, Wyo. That dam site was at the extreme upper end of the canyon. We planned another dam at the lower end of the canyon at the Yellowtail site, the same site where the structure is proposed at the present time. However, instead of going to the high dam, that one was proposed at the height of 370 feet.

The reason for adopting two dams at that time was a concern about leakage around the abutments of a high dam at the Yellowtail site, and with that limitation the only way we could get the required amount of storage which was indicated at that time, about 1,200,000 acre-feet, was to go to 2 dams and get the bulk of the storage in the upper 1 in Wyoming.

The computed capacity of those 2 reservoirs was 1,220,000 acre-feet. The estimated cost of the 2 dams and powerplants totaled $42,324,000.

A report on that plan, as I said a moment ago, was completed in 1942, and the same basic information was incorporated in the report that formed the basis for Senate Document 191, the present basis for authorization of the Yellowtail unit.

Those investigations were not carried out in detail, but they were carried far enough in 1942 to indicate there was considerable merit in developing that reach of the river, and it was apparent that a feasible project would be found, but considerable more investigation, drilling, and design studies were necessary to finally define the most economical plan. The work on those detailed investigations was started after the passage of the 1944 Flood Control Act. It was started approximately in 1946. A great deal of work has been done on the entire plan for that reach of the river since 1946.

Now there are two reasons—there may be more, but two primary reasons for adopting the present plan are that it reduced the inundation of farmlands in Wyoming and cost less than the original plan.

I would like to step up to the map here for a moment and point out some of the features of both plans.

Mr. D'EWART. Mr. Clinton, I might say for your information that Mr. Aspinall and I flew over that canyon a year ago; we are familiar with the canyon and project as seen from the air.

Mr. CLINTON. I am glad to know that, Mr. D'Ewart.

Indicating on the map, the Yellowtail Dam site is at the upper end of the presently irrigated area in the Lower Bighorn Valley, with Hardin some 40 miles to the northeast and Billings some 40 miles to the northwest. The reservoir area extends on into Wyoming to a point some 5 or 6 miles upstream from Kane, Wyo. The Kane Dam site that I mentioned a moment ago is located just below the mouth of Crooked Creek, or about 4 miles upstream from the Wyoming State line.

The original plan for irrigation involved a diversion from the river at Yellowtail site and a canal extending downstream some 70 miles on beyond the town of Hardin.

I would like to take this map down and show you a profile of the river to demonstrate these two plans for developing the canyon.

This chart indicates a profile of the river with present Yellowtail Dam shown by the heavy solid line, with tailwater elevation of 3,183 and maximum water surface elevation of 3,657. The Kane Dam site is indicated a short distance upstream from the Wyoming-Montana line, with the maximum water elevation at 3,680, indicated by a dashed line.

During the later investigations of the original plan it was found that the original surveys that were made by the Corps of Engineers for the Kane reservoir area were in error by about 15 feet in elevation. In making correction for that 15-foot error in datum, it reduced the capacity of the Kane site from what we thought would be 750,000 down to 610,000 acre-feet.

So with that reduction, it left the total capacity in the two reservoirs at 1,080,000 acre feet.

With adoption of the high dam then, if the powerplant is going to be operated fully at the high dam, it is necessary to provide reregulation of the releases from that powerplant, particularly the peaking releases, in order to avoid interference with downstream irrigation diversions to the old existing projects during the summer, and to avoid the possibility of ice jams during the winter. So the Afterbay Dam has been added. That is an additional feature not included in the original plan.

The present powerplant capacity has been adopted at 200,000 kilowatts, and that compares with a powerplant capacity of 105,000 kilowatts total that was proposed in the two dams in the original plan. In that plan a 75,000 kilowatt plant was proposed at the low Yellowtail Dam and a 30,000 kilowatt plant at the Kane Dam.

The reason for going to a larger capacity proposed with the high dam proposal is to take advantage of the high head and short penstocks that we have at that site in order to provide peaking both for the output of that plant and peaking capacity for the entire power system. If we had confined the capacity in the high dam proposal to only that needed to load factor of the production at that site, somewhere in the neighborhood of 130,000 kilowatts would have sufficed.

Going on to the present status of the Yellowtail Unit, that is, what has been done on it, where it stands now, and how long it would take to get it into construction—prior to 1946 there had been about $100,000 spent on investigation of the Yellowtail unit, and since 1946 there has been about $2,400,000 spent in detailed surveys, diamond drilling, and design studies. About 19,000 feet of drilling has been done at the site and about 1,500 feet of tunnels have been drilled into the abutments.

Detailed design studies have been carried on in the Denver office, including model studies of the spillway and outlet works.

A trail, what we call a jeep road, was constructed from the end of the existing road up to the site in order to permit the investigation, the drilling and tunnel work and so on, to be carried out.

That investigative work has carried the project almost up to the specification stage. We are at the point now where our Chief En-

gineer's office in Denver, upon receipt of construction money, could issue specifications and an invitation for bids within from 3 to 6 months from the time of the receipt of that money.

In addition, a powerline to furnish construction power at the site was undertaken. That was the line from Lowell, Wyo., downstream along the Bighorn River to the Yellowtail site. That line is almost completed, but work on it was terminated last summer because of lack of funds. It is now about 90 percent complete, and the stringing of conductor could be completed within a very short period of time and have power available there by the time the contractor moved on to the site.

The reservoir area will flood about 30,900 acres of land, with about 42 percent of it located in Montana and 58 percent in Wyoming.

The ownership of that land is varied. About 23 percent of it, or 7,000 acres, is tribal Indian lands. There are about 10,800 acres of private land, 2,500 acres of State land, and 10,600 acres of public domain.

The right-of-way problem has been somewhat severe on this unit because the dam and the lower end of the reservoir are located inside the Crow Indian Reservation. There have been a long series of negotiations with the Crow Indian Tribe in an effort to reach agreement with them on what was a proper and just compensation to them for the taking of their land for the reservoir right-of-way. In the early stages of those negotiations it was recognized that some additional value should be taken into account in the compensation to the Indian tribe, and the additional value that was taken into account in arriving at that value was what we called a power site value. If a powerplant is built there, whether it is built by the Federal Government or by private interests, it will be built for the purpose of either obtaining public benefits, or if it is built by a private corporation, there must be some profit or some return to that agency for the construction and operation of it. So what was termed a "power site value" was the increment between the total value of power production from that site and what it would cost to develop it.

The Secretary of the Interior and the regional director selected men who were considered experts in the field of making those kind of appraisals. The Commissioner of Reclamation appointed one man and the Commissioner of Indian Affairs appointed another man. They made independent appraisals and computations, and they both came up with a value somewhere in the neighborhood of $4,200,000 as the value that should be taken into account in arriving at a proper compensation to the parties owning the right-of-way in the reservoir area. It was agreed that that entire amount should not be paid to the Indian tribe because there were other owners of lands, as I have cited previously, besides the Indians. The Indians control about 23 percent of the total reservoir area.

So it was agreed that approximately one-third of that total value should properly go to the Indian tribe, and the actual figure arrived at was $1,500,000.

That offer was made to the Indian tribe at various occasions and on every occasion it has been turned down thus far.

Going on to the construction costs. There have been various estimates of the cost of constructing Yellowtail unit, particularly the

high dam, in the last 5 or 6 years since the detailed investigations were undertaken.

During the past year the Chief Engineer's office in Denver has prepared a detailed estimate, using all of the basic data obtained from the drilling, foundation exploration and detailed surveys, and also from the detailed design studies that were made in the Denver office. The estimate that his office has completed in the last 3 months totals $95,700,000 in round numbers.

Now that estimate is somewhat lower than previous estimates, in fact, lower than the estimate that was in use a year ago. The reason for the revision and reduction is mainly the result of detailed design studies. The Chief Engineer's office has found that by trial-load analysis and getting down to an actual layout of the structure, that the quantities of concrete required were about 570,000 cubic yards less than originally estimated.

In addition, it has been found that the original size proposed for the powerhouse turbines and generators could be reduced some in order to be able to obtain further economy.

So, as a result of those studies there has been within the last year a reduction of about $20 million in the cost.

I feel that the cost estimate we have now is dependable; in fact, it is almost equivalent to the engineer's estimates that would be used at the time of bid opening.

In other to give the committee an idea of the duration of the construction period and the amounts of money required——

Mr. CLINTON. I will come to the allocations later. I wish now, to give you an idea of the appropriation requirements on the basis of an economic schedule, once the construction is under way to keep it going at the most rapid rate to enable the contractor to do an economical job on it. It is estimated, for that schedule, that appropriation requirements would be about $9 million the first year, $19 million the second year, $25 million the third year, $25 million the fourth year, $11 million the fifth year, and $4,200,000 in the sixth year. That would still take about 6 years to completely finish the project and put all of the power units in service.

Now going on to the power production, we have run a series of power-production studies using recorded flows for the river. Those flows have been recorded back into the late twenties, and adjusting those flows for the future upstream development, irrigation development, or upstream consumptive uses, you find that the flow will gradually reduce. So we have arrived at two estimates of power production tht we would get from the plant.

The first estimate, based on present flows, assuming there would be no depletion at all, the plant would produce about 650 million kilowatt-hours of firm power annually and about 225 million kilowatt-hours of secondary energy for a total of 875 million kilowatt-hours annually.

We have assumed that the upstream depletion of all the additional acres that will be brought in upstream will very likely take place during the 50-year payout period and that it will all be irrigated by the end of the payout period for the Yellowtail unit, and by that time the flows will be reduced to the point where the firm production will be 597 million kilowatt-hours of firm power and 164 million kilowatt-hours of secondary power, or a total of 761 million kilowatt-hours.

For power-payout purposes we have used the average of the beginning and end in order to arrive at the revenues that the powerplant would produce during the payout period. Those average figures are 623 million kilowatt-hours of firm power, 195 million of nonfirm, and a total of 818 million. Those production figures are all at site.

When that power is put on to the transmission system, and carried over transmission lines to the load centers to the loads, there will be transmission losses that will be incurred; and after taking off the losses we have an estimate of the amount of that power that will be available at load. The average firm will be 576 million and the secondary will be 180 million during the 50-year payout period.

The amount of depletion that has been allowed in these studies is about equal to the amount that was used in the Yellowstone River compact that was entered into between the various States involved. It involved a full supply for all the lands that are under irrigation now, that are actually irrigated now, and in addition a full supply for an additional area of 370,000 acres.

Going on to the other benefits that will be gained by the reservoir, we have first made an allocation of space in the reservoir to the various uses in order to define what their benefits would be. In that allocation of space the top 17 feet of the reservoir, which includes about 259,000 acre-feet of space is allocated for exclusive use by flood control. The next 26-foot layer below that, including about 250,000 acre-feet of space, has been set up for a joint use by flood control, power, and irrigation.

The next layer, 67 feet deep, has a capacity of about 358,000 acre-feet, and that is reserved exclusively as conservation storage. That is storage that will be used for irrigation and power only and will not be encroached on by flood control.

Now, that leaves 508,000 acre-feet of dead storage below that conservation pool. The reason for that block of space being so large is in order to take care of sedimentation, or for the accumulation of the silt that will flow into the reservoir over the years.

Going on to flood control, that total of 509,000 acre-feet of space in the reservoir that will be available for the flood control at any time it is needed is sufficient to control all floods of record; and in addition it would control the design flood which is far beyond any flood of record, would control that flood to 20,000 second-feet. So we feel that the total amount of space allocated is adequate to assure people downstream as far as the Bighorn River itself is concerned that they will have ample protection in the future from damage from floods.

Mr. D'EWART. How often do you estimate that you will need this protection if it is constructed? Once in how many years?

Mr. CLINTON. Say every 20 years, Mr. D'Ewart, in the past they have had pretty large floods.

Mr. D'EWART. Before Boysen was built?

Mr. CLINTON. Yes.

Mr. D'EWART. Now Boysen is built, how often do you estimate you will need this protection?

Mr. CLINTON. It would be about another 10 years, up to 30 years.

Mr. D'EWART. In other words, you are building this space in the plan in order to protect from flood once in 30 years?

Mr. CLINTON. In that flood there will be spills from Boysen in addition to the inflow below Boysen that have to be controlled. That is still true of the 10-year flood—that Boysen only controls the watershed above that point, and there is a large flow below Thermopolis of all the tributaries that still require control.

Mr. D'EWART. How much does the construction of Boysen decrease the need for making space available for silt?

Mr. CLINTON. I do not recall whether I have those figures in mind. I can give you the relative figures, Congressman D'Ewart.

The total load at the Yellowtail site, with an entirely uncontrolled river, would be about 9,000 acre-feet a year, and with Boysen in, that is reduced to 4,550 acre-feet. So comparing those two, Boysen takes about half the load out and leaves about half at the Yellowtail site.

Mr. D'EWART. As I remember the area, the chief contributor of silt is Wind River Basin, which is above Boysen.

Mr. CLINTON. That is right.

Mr. D'EWART. Then I would think the decrease in silt would be less than half and after the river channelizes it would still be less than that.

Mr. CLINTON. There is still a heavy contribution from the Middle Bighorn Basin. All of those streams flow through these shale and sandstone formations. There is a heavy contribution from Nowood River, from Shell Creek, the Greybull River and various tributaries that drain that middle basin. The heaviest part is from the eastern side of the basin along the foothills of the Bighorn Mountains.

These figures I have given you are based on actual silt measurements at the Yellowtail site over the past period of 10 or 15 years.

Mr. D'EWART. But before Boysen was built?

Mr. CLINTON. Yes, before Boysen was built. But they also took measurements at Thermopolis so they can get the load at Thermopolis and the Yellowtail site.

Mr. D'EWART. Irrigators from the Hardin Irrigation District have advised me that the silt has been very materially reduced since Boysen was built, indicating to me the amount of silt carried by the river is much less than heretofore.

Mr. CLINTON. These figures would indicate that about half the load should be taken out down there by Boysen.

Going on to recreation, the National Park Service was asked by the Bureau of Reclamation to make a study of Yellowtail Reservoir to determine what value it would have for recreation. Their conclusion was that it would be very attractive to the people living in that area, that it would draw people from a radius of about 50 miles, which would include the city of Billings and surrounding towns within that radius, and it would be attractive from the standpoint of fishing and boating mainly. The big problem they were concerned with was how the public could get access to the full length of the reservoir because of the impassable situation up and down the canyon. So most of the access will have to be limited at the lower end at the dam and the upper end in Wyoming in the vicinity of Kane.

They made an estimate of the annual value of the reservoir for recreation and arrived at a figure of $109,000 or a capitalized value of $3 million.

The Fish and Wildlife Service of the Department of the Interior also made a study of the reservoir from the fish and wildlife stand-

point. Their main conclusion was that its greatest contribution to fish and wildlife would be in the form of providing reservoir or lake fishing in that area, and that it would provide very good lake fishing. They arrived at an annual benefit of $50,000 a year.

There will be general benefits from the project, of which the major one is silt control. Silt control will be beneficial downstream to the same extent that you have cited for Boysen Reservoir, Congressman D'Ewart, but they should have approximately clear water all the way down to the mouth of the Bighorn River after Yellowtail is built. The load in the Yellowstone River will be reduced considerably. That reduction in silt load is beneficial from two standpoints: It eliminates the need for cleaning silt from canals, and it is beneficial to all the irrigation projects that depend upon pumping. Any project that is pumping that muddy water incurs an additional cost in maintenance and upkeep of their pumps.

Another general benefit from construction of the reservoir would be that it will provide a practical means of administering the Yellowstone River compact, because without that reregulation at the State line between the two States it would be difficult to administer the compact as it is now set up.

The third and last general benefit from it will be in the form of providing a reliable base flow in the Bighorn River below the Yellowtail Dam site, and to a lesser extent in the Yellowstone River.

The power operation will also always guarantee a minimum of 1,000 second-feet, and the average will be closer to 2,000 second-feet, and that will eliminate the problem that several of the present irrigation districts now have of diverting the water when the Big Horn River gets extremely low, and when it drops down below 500 second-feet they have a pretty severe problem in getting water out of the river into their canals.

It will be of benefit to pumping projects by keeping a more constant river stage at the pumps.

Going on to the allocation of costs, there have been several cost allocations made on the Yellowtail project during the past 10 years, with several methods used.

In preparing for this hearing I looked over several of them, but did not use any of them because within the past month we received directions from the Department of the Interior to use specific criteria for allocation of costs that had been agreed to by the several Federal agencies involved in resource development. The agreement among those agencies was that the preferable method of allocating costs was the one termed "Separable costs—Remaining benefits." That method has also been adopted by the Federal Interagency River Basin Committee.

Some of my engineers in the last couple of months have attended meetings with the Corps of Engineers and the Federal Power Commission on this whole mater of allocating costs of multipurpose units in the Missouri River Basin. As a result of those meetings I feel that our engineers have become pretty familiar with this new method and how to apply it, and there is general agreement among that group at the working level on how to proceed in allocating costs for any multipurpose unit in the Missouri Basin.

So they have endeavored to apply experience from those meetings and the instructions as carefully as they could to the process of allocating costs on this multipurpose unit.

Now before going to the process of allocation I have another feature of the Yellowtail unit that I would like to explain, and that is that it is integrally tied to the irrigation unit in that the Hardin unit must have water diverted to it about 100 feet above river level. There are two ways of making that diversion, one is by placing an outlet through the dam and building a concrete conduit, down the canyon walls for a distance of about three-quarters of a mile.

That plan would enable the gravity diversion to the irrigation unit. The other plan involved dropping all of the water through the large powerplant at the toe of the dam into the afterbay pool and then pumping it back up to the canal. The costs of these two plans were carefully estimated and the power production under both of them was also estimated, and they found that the power production, particularly of firm power, could be appreciably increased by going to the plan involving dropping water through a large powerplant and pumping it back to the canal.

Hence that plan was adopted largely because it provided the greatest overall benefit to the whole Missouri Basin project, but at the same time I feel that we must recognize that when the irrigation unit is built that it should be entitled to an allocation of capital cost and also of annual costs on the basis of what it would have cost them by the most economical means of making their diversion.

In this case it turns out that the most economical way to make that diversion is by gravity. The pumping plant costs about $2,775,000 more in construction costs than the gravity plan would cost. In addition the only annual cost on the gravity plan to deliver water to the same point in the canal would be the cost of operation and maintenance of the dam outlet and the three-quarters of a mile of conduit.

So in making allocations of cost on Yellowtail we have first recognized that $2,775,000 of that pumping plant cost should be classed as a power cost. The pumping plan has been adopted because of the benefits of power, so power should pay that portion. So in making the allocation of Yellowtail unit costs the $2,775,000 has been added to the construction cost I gave you earlier of $95,700,000, thus making a total of $98,496,000.

By carrying through the cost allocation process that I have mentioned previously the results show that the irrigation unit would be allocated $26,552,000 in the dam and reservoir. Power would be allocated $67,203,000. The flood-control allocation would be $4,241,000; recreation, $500,000.

The recreation allocation is confined only to the cost of facilities that would be built to provide public use of the reservoir, and that cost estimate was provided by the National Park Service. We do not propose to allocate any of the joint costs or costs of the dam and reservoir to recreation on a nonreimbursable basis. Only the cost of facilities is allocated on a nonreimbursable basis.

As I pointed out earlier, the National Park Service's estimate of benefits far exceeds cost of that facility, so they feel they can well justify the cost of building the facilities. Now as far as flood control, it is also a nonreimbursable feature, and the cost of that should be justified on the basis of benefits that will be accruing to flood control.

The annual value of those flood-control benefits as estimated by the Corps of Engineers, is $210,000 per year. The capitalized value

over a 60-year period is $5,806,000. That value is compared with the cost allocated to flood control of $4,241,000. So it does demonstrate that as far as flood control it does have a favorable benefit-cost ratio.

I believe that takes us up to the point where we have all of the basic information now to get down to the appraisal of the financial feasibility of the project—that is, how it will pay out. Now the one point I have omitted covering thus far on the power side of it, is how the power will be marketed, whether there will be a market and also what rates the power can be sold at and then finally to carry the revenue determinations into a payout study.

I would like to turn that phase of the explanation, Mr. Chairman, to Mr. Walker, who is very familiar with it. He has been working on this particular phase of the unit for several years.

Mr. ASPINALL. Mr. Chairman, may I ask one question?

Mr. HARRISON. Yes.

Mr. ASPINALL. Is there any benefit-cost ratio determination yet on this project?

Mr. CLINTON. We do have one.

Mr. ASPINALL. You do not have it in your statement?

Mr. CLINTON. No, I did not put it in my statement. I will be glad to provide it, Mr. Congressman. I will provide it for the record.

Mr. ASPINALL. All right.

(The information referred to follows:)

BENEFIT-COST RATIO FOR YELLOWTAIL UNIT

Since about 26 percent, or $26,552,000, of the cost of the Yellowtail Dam and Reservoir is allocated to the Hardin unit, it is necessary to divide the irrigation benefits of the Hardin unit on some rational basis between the Yellowtail and Hardin units before a benefit-cost ratio can be computed for the Yellowtail unit. This has been done on the basis of the ratio of irrigation costs in the Yellowtail unit ($26,552,000) to the total irrigation cost ($37,501,000) in both units, thus allotting 70.8 percent of the irrigation benefits to the Yellowtail unit. On the basis of this division of the total irrigation benefits, both direct and indirect, between the two units, the benefit-cost ratio for the Yellowtail unit is computed as follows:

Total annual benefits	$8,963,290
50-year annual equivalent costs	$5,768,847
Benefit-cost ratio	1.55 to 1.00

The ratio of direct benefits only to total costs is 1:38 to 1:00; the ratio of indirect benefits only to total costs is 0.17 to 1.00.

When the remaining 29.2 percent of the total irrigation benefits are applied to the specific costs ($10,949,000) of the Hardin unit, the benefit-cost ratio for that unit is computed as follows:

Annual irrigation benefits	$578,160
50-year annual equivalent costs	$496,961
Benefit-cost ratio	1.16 to 1.00

For the Hardin unit the ratio of direct benefits only to total costs is 0.44 to 1.00; the ratio of indirect benefits only to total costs is 0.72 to 1.00.

Mr. HARRISON. Proceed.

Mr. WALKER. Mr. Chairman and members of the committee, my name is John R. Walker. I am chief of the Power Division for region 6 of the Bureau of Reclamation at Billings, Mont.

The first subject I would like to cover is the power marketing for the Yellowtail unit. For the purpose of explanation I would like to refer to this display map. The principal marketing area for the Yel-

lowtail unit comprises Montana east of the Continental Divide, the northern part of Wyoming, and the western and northwestern portions of North Dakota as indicated by this red outline.

By virtue of existing and proposed interconnections between the major Bureau transmission systems it will be possible to utilize Yellowtail power in augmenting the power supplies in southern Wyoming and in the eastern portion of the Missouri Basin. You will notice with the plant located here and lines emanating up to Miles City and down to Lovell you will be able to integrate power down to this area and also carry it out over to the eastern part of the basin.

Agriculture, mining, and industry are economic activities of the primary marketing area. In recent years the production, transportation, and refining of petroleum products has assumed major proportions and its rapid expansion is continuing.

Northern Wyoming has long been a heavy oil producer and the Williston Basin extending in the eastern part of Montana and western part of North Dakota is rapidly assuming major proportions. A large variety of minerals occur, chiefly in the mountain sections in the western part of this area. Underlying the whole area are large deposits of coal reserves, and there are also large reserves of natural gas.

There are prospects for large synthetic liquid fuel plants which will use a considerable amount of power.

In analyzing the present and future power requirements and supply in the Yellowtail market area use was made of the report, "Power Requirements and Supply, Missouri River Region," prepared by the Subcommittee on Electric Power of the Missouri River Basin Interagency Committee. This report, published in May 1953, represents the coordinated efforts of representatives of investor-owned municipal, public power, rural electric and Federal utility systems and is used as an impartial source of data for this presentation.

This report shows that in 1953 the total power requirements in this area, including reserves and exports, amounted to 577 megawatts. The effective generating capability in the area was 532 megawatts. The difference between the requirements and the supply was made up by imports from southern Wyoming and Colorado, as well as imports from west of the Continental Divide.

The generating capacity, except for some 66,000 kilowatts located in a steam generating plant near Billings, is concentrated around the periphery of this area [indicating], and consequently it is very difficult to integrate the power from the various points. The integration is further limited by lack of transmission facilities between the systems in Montana and the systems in Wyoming and to the south. The Yellowtail power plant by virtue of its central location and by its associated transmission lines would provide means of integrating the existing systems.

From the report I have mentioned the estimated future power requirements in 1960, 1965, and 1970 are estimated to be 138 megawatts in 1960, 264 megawatts in 1965 and 405 megawatts in 1970. These are additional power requirements over what we have estimated to be available.

This estimate is based on a very conservative load growth of 5 percent annually over the 17-year period from 1953 to 1970. I call that

conservative because we have already found by actual records that the Bureau's Big Horn loads in Wyoming increased about 11 percent annually from 1950 to 1953 and the load growth of 17 cooperatives served by the Bureau in the general area of eastern Montana and western North Dakota increased annually 23 percent from 1950 to 1953.

On the basis of the additional requirements I have indicated there should be a requirement for the output of at least three units of the Yellowtail power plant by 1960 with the fourth unit required about 1 year later.

The next subject I would like to cover is the power pay-out. In order to demonstrate financial feasibility of Yellowtail unit power development, a pay-out study has been prepared on a 50-year basis, exclusive of basinwide project relationships except that the transmission facilities and power output are considered as being integrated into the interconnected power system.

In making this study the investment components of the power development were calculated to include the capital costs allocated to power at site and a proportional amount of the interconnected project transmission system based upon the ratio of the installed generating capacity at Yellowtail to total system capacity.

This investment was suballocated into interest-bearing commercial electric plant and noninterest-bearing irrigation electric plant in accordance with the use estimated to be made of the system power capacity by commercial and irrigation demands respectively, or, 75 percent to the former and 25 percent to the latter.

For purposes of determining the disposition of energy the average annual firm energy generation at Yellowtail after allowance for transmission losses was divided in accordance with the basinwide average into firm commercial and irrigation pumping sales. Thus 12.7 percent of total firm energy was assigned to irrigation pumping sales.

Mr. HARRISON. We will have to ask Mr. Walker to continue his testimony tomorrow morning at 10 o'clock inasmuch as the House is in session, and the quorum call is now sounding.

Mr. HARRISON. I would like to call Mr. Shoup at this time to make a brief statement.

Mr. ASPINALL. Before Mr. Shoup comes before the committee I would like to say that he is a very good friend of mine and a distinguished son of an illustrious Governor who served the State of Colorado for 4 years.

STATEMENT OF MERRILL E. SHOUP, PRESIDENT OF HOLLY SUGAR CORP., COLORADO SPRINGS, COLO.

Mr. SHOUP. Thank you very much for the opportunity to put this in. I have to be in Denver at a meeting in the morning.

Mr. Chairman and members of the committee, my name is Merrill E. Shoup. I am president of Holly Sugar Corp., whose main offices are in Colorado Springs, Colo., and which has beet sugar factories located in the States of Montana, Wyoming, Colorado, and California. I am appearing concerning the commencement of construction of the Yellowtail Dam on the Big Horn River near Hardin, Mont.

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This project, part of the Missouri River Basin project, in addition to its flood control and recreation aspects, will provide a supply of gravity irrigation water for about 44,000 acres of dry land near Hardin, Mont., and will provide the power necessary for pump irrigation of some 180,000 additional acres of land along the Little Big Horn, Tongue, Powder, and Yellowstone Rivers. The committee has had an exhaustive presentation as to the economic feasibility of the project.

Much of the growth of the West since the passage of the Reclamation Act in 1902 has been based on projects of the kind under consideration. These projects, which open up new farming and industrial opportunities in the West, are but a part of our dynamic and expanding society. They open up new manufacturing and service opportunities for people in other parts of the country. They conserve and make useful resources which otherwise might be idle.

Our industry, the sugar beet industry of the West, has grown up in the irrigated valleys of the Western States. I should like to emphasize the value of this industry and the unique place which it holds in the Nation's agricultural economy. The desirability of having a healthy and substantial domestic sugar industry has for many years been recognized by the Congress, as is evidenced by the Sugar Act of 1948 and its predecessor acts. In addition to providing a supply of sugar which can be relied upon even in times of emergency, the beet sugar industry has other unique advantages. As the director of the Montana State Extension Service said in 1952 in a speech before the Montana Reclamation Association:

> Montana needs a beet sugar industry. There are a number of reasons for this. Sugar beets encourage a desirable system of farming. Successful growing of sugar beets requires a crop rotation. Sugar beets for many years have constituted our principal row crop in irrigated farming rotations. This is important from the standpoint of weed control and also to improve the physical condition of the soil. Sugar beets, which are a deep rooted crop, have been demonstrated to be a particularly good crop for improving the physical condition of the soil * * *.
>
> Sugar beets encourage the feeding of livestock on the farm. The importance of livestock in maintaining the soil fertility program already has been discussed. Sugar beets are a dependable cash crop which also help to stabilize farm income. A study recently made by the Department of Agricultural Economics at Montana State College shows that over the years there is less price variation for sugar beets than for almost any other important farm product in Montana. The variation in sugar beet price is considerably less than for the price for dairy products, which we ordinarily think of as being relatively stable.

The economic and other advantages which arise from an irrigated farm economy and the production of sugar beets are many. The productivity and, consequently, the value of the land is greatly increased as a result of irrigation projects. No small factor is the employment which beet sugar factories offer in the area involved. Much of such employment is afforded to persons engaged in farming after seasonal operations have been finished.

The type of farming conducted on irrigated lands is such that crops of concentrated value, such as sugar beets, can be produced. Such farming also makes possible the increased farm feeding of livestock. The livestock so produced represents another farm product of high value, not only by reason of the income directly provided from the sale of livestock, but also by reason of the added fertility and productivity which results from farm feeding of livestock.

The growing of sugar beets is an integral part of well-rounded farming practice on irrigated lands, since sugar beet tops and sugar beet pulp are two principal livestock feeds. Irrigated farming, coupled with the production of sugar beets, has other distinct advantages to the community involved and to the Nation. Sugar beets are a cash crop whose relative importance among the products of the farm becomes increasingly important during lean years. Beets are thus a crop which tends to add stability and security to farming.

In addition, irrigated agriculture tends toward smaller family-sized farms, rather than to large landholdings by a few farmers, with many employees on each farm. The promotion of family-farm ownership is a desirable effect of irrigation projects.

The State of Montana is the site of two beet sugar factories of Holly Sugar Corp. One of such factories is at Sidney, in eastern Montana, and one is at Hardin, on the Big Horn River, close to the location of the Yellowtail project.

The factory at Hardin was built in 1937. Today the building of such a factory would probably cost in the neighborhood of $8 million. For some period after its construction, the Hardin factory had reasonably satisfactory beet runs. Its volume in several recent years, however, has not been sufficient to justify the original investment. The completion of the Yellowtail-Hardin project would provide a large acreage of excellent irrigated land for sugar-beet production.

Such land would provide a sufficient supply of sugar beets for the Hardin factory. There should be noted in this connection the great need in the area for power for pump irrigating. The additional irrigated acreage would include not only land irrigated by waters impounded in the dam itself but also a large acreage which could be pump irrigated in other river valleys in the area by the use of Yellowtail power.

I have pointed out that the construction of the Yellowtail Dam will be of benefit to Holly Sugar Corp. The benefits to the corporation, however, are minor in relation to the many benefits which will derive from the Yellowtail Dam. It is my understanding, as I said earlier, that approximately 44,000 acres of dry land near Hardin will be irrigated by water impounded in the dam.

The placing of such land under irrigation will vastly increase its value and productivity, to the benefit of the owners and farmers involved, the State of Montana, and the Nation as a whole. In addition, the Yellowtail Dam will provide the power necessary for pump irrigation of some 180,000 additional acres of land along the Little Big Horn, Tongue, Powder, and Yellowstone Rivers. There is a pressing need in these valleys for power for pump irrigating. Thus, the irrigation of approximately 225,000 additional acres of land will be possible as a result of the construction of the Yellowtail Dam.

Another factor to be considered is that the land to be occupied by the dam and its impounded waters is largely inaccessible canyon floor and of little agricultural value. The placing of such large additional acreage of land under irrigation will not only result in a significant contribution to the Nation's production of food and fibers but also add substantially to the demand for new homes, new machinery, new services, and all the things that go with community development.

The importance of placing additional land under irrigation is underscored by the fact that, if present population projections by the

Bureau of the Census are realized, by 1975 the United States will have 190 million people and will need the food from 150 million more acres of land than are under cultivation today. We are a growing Nation and the temporary agricultural problems of today should not blind us to the needs of the future.

In addition to the tremendous contribution which the Yellowtail Dam will make to the economy of the State of Montana and the United States by way of increased productivity, the dam will create many other benefits. The dam will be capable of producing an annual average of nearly 750 million kilowatt-hours of electric energy. I understand that the area to which this power could be distributed is in need of additional power for both public and private uses.

The Yellowtail Dam is a part of the Missouri River Basin project and will be a major step in the overall plan for the control of Missouri River drainage system floodwaters. The dam will also retain large quantities of silt which are presently carried into the Yellowstone and Missouri Rivers and finally into the very valuable Garrison Reservoir by the Big Horn River. In addition, the dam will provide recreational facilities of considerable value.

We must all recognize the necessity of reducing Federal expenditures and balancing the Federal budget. I firmly believe, however, that the reduction in expenditures necessary to accomplish these objectives should be principally in operating expenditures and not in capital improvement items. Projects such as the Yellowtail represent an investment necessary to the future welfare of the Nation.

It is my belief that the Congress should move steadily forward with the construction of selected projects of demonstrable worth such as the Yellowtail. While I believe that the Yellowtail project is of such merit as to warrant construction at any time, the slowdown which has occurred during the last year in the Nation's economic pace has probably made immediate construction more appropriate than ever.

Mr. HARRISON. Mr. Shoup, I regret that we must leave to go up on the floor at this time.

Mr. SHOUP. Thank you very much for allowing me the opportunity.

Mr. HARRISON. The committee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 11:05 a. m., the committee recessed, to reconvene at 10 a. m. Friday, April 30, 1954.)

YELLOWTAIL DAM, MONT.

FRIDAY, APRIL 30, 1954

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON IRRIGATION AND RECLAMATION OF THE
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS
Washington, D. C.

The subcommittee met, pursuant to recess, at 10 a. m., in the committee room, New House Office Building, Hon. William H. Harrison (chairman) presiding.

Mr. HARRISON. The committee will come to order, and we will resume the testimony of Mr. Clinton and Mr. Walker which was interrupted yesterday, if the gentlemen will come forward. I think Mr. Walker was testifying.

Mr. D'EWART. Mr. Chairman, I would like to suggest Mr. Merrill E. Shoup's testimony be placed in the record immediately following the departmental record.

Mr. HARRISON. Without objection, it is so ordered.

STATEMENT OF FRANK M. CLINTON, REGIONAL DIRECTOR, BUREAU OF RECLAMATION, BILLINGS, MONT., ACCOMPANIED BY JOHN R. WALKER, REGIONAL POWER MANAGER, BUREAU OF RECLAMATION, BILLINGS, MONT.

Mr. WALKER. The approved interim schedules of rates for wholesale firm power service for the Missouri River Basin project have been used in the study. This schedule of rates requires payment of a capacity charge of $0.75 per month per kilowatt of billing demand, or $9 per kilowatt per year, and a monthly energy charge of 3.5 mills per kilowatt-hour for the first 250 kilowatt-hours per kilowatt billing demand and 3.0 mills per kilowatt-hour for the balance used. Under this schedule of rates the total charge averages 5.5 mills per kilowatt hour at 50 percent load factor. However, inasmuch as the Yellowtail powerplant is designed to provide system peaking and consequently has a higher kilowatt installation than normally required to dispose of the firm energy, it is assumed that all firm energy will be sold under the 3.5 mill block of the schedule of rates. The revenues for firm energy were therefore calculated on the basis of $9 per kilowatt and 3.5 mills per kilowatt hour.

Mr. D'EWART. Mr. Walker, if I might interrupt, then you are familiar with the report on the Crow Indian Tribe lands required for proposed Yellowtail Dam and Reservoir project, Bureau of Reclamation, put out by the Federal Power Commission in 1950; are you not?

Mr. WALKER. I do not know that I am, sir.

Mr. D'EWART. That has quite a different power rate, and I wondered how you justified the difference in power rates. If you are not familiar with it, we will pass it.

Mr. WALKER. Thank you, sir.

The capital and annual repayment obligations for the Yellowtail unit were divided so as to recognize the Hardin unit irrigation costs which would obtain under alternate plans of development. The most economical plan for providing irrigation water would be by gravity diversion from the Yellowtail reservoir. This plan would reduce total power production from that attainable under the proposed plan whereby maximum utilization of falling water would be achieved by running all water through the powerplant and then pumping the irrigation water back to the required elevation for diversion. The latter plan proved most economical from an overall standpoint and was selected. However, irrigators were considered obligated only to the extent of those lesser costs which might have been incurred by the gravity diversion method. In the proposed plan, an amount of $2,775,000 was added to the separable power capital costs representing the excess capital costs of the pumping installation over gravity diversion costs. Also for the same reason, an operation and maintenance differential of $35,200 was added to annual power costs, and pumping energy sales were reduced by $44,300, the amount required to pump water into the west canal for the Hardin unit.

The estimated reimbursable power development costs used in the study are as follows:

These figures are rounded out to the nearest $1 million. The total power costs amount to $92 million. This cost is made up of three items: Separable costs, $35 million; transmission system, $24 million; and joint costs, $33 million.

The $91 million is then subdivided into the interest-free investment amounting to 25 percent or $23 million, and the commercial electric-plant investment, which is interest bearing, amounting to $69 million.

In this study we have used an annual operation and maintenance charge of about $606,000. The replacement reserves used were about $494,000.

In analyzing the results of this study over a 50 year period we find that the total gross revenue is $209 million. Deducting $56 million to cover operation, maintenance and replacement reserves leaves a net operating revenue of $153 million. Deducting the $114 million to cover amortization of the interest-bearing portion of the investment at 3 percent and in 50 years leaves $39 million as the net surplus after repayment of the commercial investment. Deducting $23 million then to cover the interest-free investment leaves as a final result a net surplus in 50 years after repayment of all power costs of $16 million.

This study shows that during the 50 year period there would be interest charges collected amounting to $45 million.

This analysis, therefore, demonstrates that the Yellowtail unit power development is economically and financially feasible under the approved interim schedules of rates for power service in the Missouri River Basin project.

That concludes my statement, sir.

Mr. HARRISON. Do you have any questions, Mr. D'Ewart?

Mr. D'EWART. No, I do not believe so.

Mr. HARRISON. Do you have any further statement, Mr. Clinton?

Mr. CLINTON. Yes, I do, Mr. Chairman. I would like to go on and cover the Hardin unit, which is the irrigation unit that is closely associated with the Yellowtail unit.

Mr. HARRISON. You may proceed.

Mr. CLINTON. I would like to point out, first, on the map the features of the Hardin unit.

The lands involved in the Hardin unit are shown on this general map in yellow and they are all located on a bench overlooking the valley above the present irrigated land in the valley. The area that is shaded in green on the map is the lands that are now irrigated and have been irrigated for several years. They are all located in the river bottom. The main reason why the bench lands have not been irrigated in the past is because of the problem and high cost of getting water up on to that bench. Our present proposal is, as I described briefly yesterday, to put in a large pumping plant in the pool of the Afterbay Dam and pump from there into the main canal on the west side of the river. That pumping plant will have a lift of about 90 feet and a total capacity of 1,095 second-feet. Of that total pump capacity a thousand second-feet goes into the west canal. That canal follows the edge of the foothills through the length of the valley down for a distance of about 70 miles and extends downstream below Hardin. It has a few large structures in it: Two large siphons, one across Beauvais Creek and one across Woody Creek, in addition to two substantial drops to avoid difficult sidehill canal construction.

The other 95 second-feet from the pumping plant is carried across the river at the pumping site through an inverted siphon to a canal on the east side of the river. The canal on the east side of the river will serve about 5,800 acres, 4,000 of which is new land, and 1,800 acres is now partially irrigated from Soap Creek and requires a supplemental supply.

On the east side there is a relift plant to serve about 1,800 acres indicated by this short canal between the pumping site and Soap Creek.

Mr. D'EWART. What is the rate charged for power for that pumping?

Mr. CLINTON. The normal rate would be the Missouri Basin pumping rate of 2.5 mills for Federal projects.

Mr. D'EWART. And that is charged against the irrigation project?

Mr. CLINTON. That is right. I will explain a little later on how we handle that charge.

I would like to make clear at this point that the information I am presenting here is largely based on a reconnaissance survey. Most of it dates back to the reconnaissance survey that was made by the Bureau of Reclamation in 1939–42, and that considerable additional investigation work will be needed before the plan and the acreage in this unit can be finally defined. However, I believe that the figures on costs and acreage that I am presenting here are closely indicative of the final answers we will get after the detailed investigation. However, more engineering work on surveying and estimating costs of alternate canal layouts may change the acreage somewhat. It may be possible to irrigate more acreage than we now have in this reconnaissance plan. The total now is 45,800 acres.

The remaining work to be done on it is the detailed classification of all lands in the project area. The Bureau plans to start that detail classification work during the coming summer.

The construction-cost estimate for the whole Hardin unit is made up of several items. On the main pumping plant, all that we are including in cost to irrigation project is the equivalent of what the gravity diversion would cost, so the amount charged to the irrigation project is $2,246,000. The relift pumping plant on the east side of the river is estimated at $146,000; canals and siphons, $3,314,000; laterals, $2,597,000; drains, $2,436,000; farm-unit layout, $210,000; with a total for the entire distribution system of $10,949,000. That total divided by the 45,800 acres in the project averages about $240 an acre.

The irrigation unit is entirely dependent on the Bighorn River for its water supply and about 3.8 acre-feet per acre will have to be diverted from the river annually to serve the unit. The total annual requirement is about 170,000 acre-feet a year.

The depleted flow in the Bighorn River will not be sufficient to serve all of the presently irrigated lands downstream and still provide the 170,000 acre-feet required for this unit during the irrigation season. So some storage must be provided. Our estimate of the storage requirement for the Hardin unit in the Yellowtail Reservoir is 95,000 acre-feet, and that amount of space will be reserved in the reservoir for the irrigation unit.

The lands in the unit are of very good quality, as indicated from all soil surveys that have been made so far. There was some concern about the drainage, but that has been pretty well eliminated by a deep-boring study that was made by the Bureau in 1952. That boring study indicated that the entire bench is underlain with coarse gravel and that there are going to be no serious drainage problems. It will require, however, some project drains to get rid of surplus water, surplus waste, and to provide for farm drainage. But beyond those main trunk drains there should not be any requirement for drains on individual farms.

The land at the present time is largely used for dryland wheat farming. About 95 percent of it is in dryland wheat now and about 10 percent in grazing. The wheat yields on it in past years have ranged from a maximum in wet years of about 27 bushels per acre down to 4 bushels per acre in dry years, with a long-time average of about 13 bushels.

In 1949 there were about 28,000 acres of the irrigable area operated by 4 owners, and the tabulation of ownership in 1949 shows about 27,000 acres of the irrigable area was in Indian ownership. After irrigation water is made available to the land, the cropping pattern will change radically. Under irrigation the major crops will be alfalfa, sugar beets, and grain.

Mr. D'EWART. In other words, the construction of this irrigation project will take it out of the category of producing a surplus crop and put it into the category of nonsurplus crop producing?

Mr. CLINTON. That is correct, Congressman D'Ewart. The wheat acreage would go down from the present acreage of around 40,000 to about 5,000. There would be very little wheat raised under irrigation.

Now to total up the costs that must be charged to this irrigation unit we have to put together the total cost of the distribution system, which is $10,949,000, and to that we must add the allocation of the cost of the dam and reservoir that, under the new criteria for allocating costs, is charged to irrigation. That amounts to $26,552,000, making a grand total charged against the irrigation unit, the Hardin unit, of $819 per acre.

Now we have made an appraisal of the amount that water users on the Hardin unit will be able to pay after they have gone through their development period and gotten up to the full production stage. We have made what I think is a conservative estimate of $6 per acre annually as their capacity to pay on new land and $5 per acre on supplemental water land. Against that $6 per acre must be stood their annual operation and maintenance costs which, taking into account the fact that they are based on gravity diversion, amount to $2 per acre. So that leaves $4 per acre that they can pay on construction. In a 40-year repayment period they would pay $7,256,000 on construction.

Taking that $7,256,000 off the cost of their distribution system leaves $3,693,000 that would have to be paid from basin power revenues. Applying that total payment capacity of $7,256,000 against the total costs allocated to irrigation, which is $37,501,000, leaves $30,245,000 that must be paid from basin power revenues.

Now as a measure of what they can pay in 40 years percentagewise: They can pay 66 percent of the cost of the distribution system. Toward the total cost allocated to the unit they can only pay 20 percent.

In comparison with other units in the Missouri Basin and elsewhere in the West that are under investigation or proposed by the Bureau of Reclamation at the present time, the Hardin unit compares very favorably. Considering the cost of the distribution system of $240 an acre, it is, if anything, low compared to other units throughout the basin and elsewhere in the West. The proportion of charge in the reservoir may seem high at the first glance, but under the new method of allocating costs it is based on the equivalent of what it would cost to provide the 95,000 acre-feet of active storage. That would require a dam large enough to store 455,000 acre-feet of silt and the 95,000 acre-feet of active storage; and in the allocation process that alternative cost has been carried in and averaged in with the similar alternative costs of the other units.

As the calculations are carried through, the end objective is to give each of the uses, each of the purposes that are served from the reservoir, an equal share in the savings obtained by multiple-purpose unit. But even after distributing those savings around, the irrigation unit still ends up with a little over $26 million charged against it.

I think the combination of the two statements, Mr. Chairman, will give the committee a composite picture of the returns and deficits and surpluses on the two units.

The Yellowtail unit shows a surplus of power revenues in 50 years, and the Hardin unit shows a deficit in payout after applying all of the water-users' payments. I believe that is all I have to present today as a basis for the committee's consideration of whether either or both units are feasible. I think all of the factual information is there to put the two together in any way the committee wishes.

I believe that concludes my statement, Mr. Chairman.

Mr. HARRISON. Any questions from any members of the committee?

Mr. D'EWART. The deficit on the two projects taken together is roughly $14 million?

Mr. CLINTON. About $14 million; that is right.

Mr. D'EWART. And power rates are based on an integrated Missouri Basin transmission system?

Mr. CLINTON. That is correct, the 5½ mill firm power rate.

Mr. D'EWART. This project standing by itself would have to charge a higher rate than that to pay out?

Mr. CLINTON. Either that, or the payout period would have to be extended, Congressman D'Ewart. The net revenues after the power investment is paid out amount to a little over $2,800,000. So the power payout period could be extended a few years to cover that $14 million deficit.

Mr. D'EWART. I have one more question. As I remember it, there is something like $2 million plus charged to drainage.

Mr. CLINTON. That is correct.

Mr. D'EWART. Why is so large a sum needed for drainage when this is a bench project underlain with gravel.

Mr. CLINTON. The soils overlying the gravel are fairly tight. There is a 4- to 10-foot layer of soil overlying the gravel, and it is fairly impermeable and unless it is relieved by trunk drains at fairly wide intervals there will be an accumulation of perched water table above the gravel because subsoils will not permit the water to go on through into the gravel. Once it gets to the gravel, we have no problem in getting rid of it then.

Mr. D'EWART. Have you any information as to classes of these soils?

Mr. CLINTON. I do not recall the percentage, but the portion of class 1 and 2 soils is relatively high on this project. It should run up in the 60 or 70 percent range.

Mr. D'EWART. How many times have you tried to reach a fair and equitable settlement with the Crow Tribe for the use of the reservoir site?

Mr. CLINTON. The negotiations have proceeded, as I recall over some 4 years, and there has been at least three tries that I recall in various meetings, the last meeting being held last December.

Mr. D'EWART. Those negotiations have not been accepted?

Mr. CLINTON. They have not so far.

Mr. D'EWART. Mr. Chairman, I have a letter signed by Fred G. Aandahl, Assistant Secretary of the Interior, dated January 6, 1954, in which he goes into the history of these negotiations and he draws certain conclusions. The last paragraph reads as follows:

> Being unable to arrive at a negotiated settlement with respect to the tribal lands required for the Yellowtail undertaking, it appears that a fair and just settlement can most expeditiously and surely be had through a judicial determination of the amount to be paid the Crow Tribe. It is our recommendation that consideration be given to this course of action.

The letter was addressed to Joseph W. Martin, Speaker of the House of Representatives. I ask that this letter be made a part of the record at this point.

Mr. HARRISON. Any objection?

The Chair hears no objection. It is so ordered.

(The letter referred to follows:)

FEBRUARY 3, 1954.

CONDEMNATION OF INDIAN LANDS NEEDED FOR THE YELLOWTAIL DAM AND RESERVOIR SITE

Crow Indian Tribe—Indian Tribal Lands—Yellowtail Project

Section 9 of the act of June 28, 1946 (60 Stat. 333, 336) which prohibits "further construction work on the Crow Reservation without the consent of the Crow Tribe and the irrigation districts affected" applies only to the extension of an existing irrigation system on the Crow Reservation and is not applicable to the construction of the Yellowtail Dam.

The Congress has specifically authorized the Yellowtail Dam as a reclamation and power development and has provided that in undertaking the project and carrying out his plans, the Secretary shall be governed by the Federal reclamation law (Flood Control Act of 1944, 58 Stat. 887). Section 7 of the organic Reclamation Act of June 17, 1902 (32 Stat. 388) gives the Secretary of the Interior express authority to condemn lands needed for a reclamation project.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SOLICITOR,
Washington 25, D. C., February 3, 1954.

MEMORANDUM

To: The Secretary.
From: The Solicitor.
Subject: Condemnation of Indian lands needed for the Yellowtail Dam and Reservoir site.

On October 27, 1952, this Office released an opinion (M–36148) to the Secretary in which the conclusion was reached that because of section 9 of the act of June 28, 1946 (60 Stat. 333, 336), the United States is without power to construct the Yellowtail Dam and Reservoir on Crow Indian tribal lands, and that despite specific authorization of the dam in the Flood Control Act of 1944, it cannot be built.

An extensive examination of this entire situation has been made by this Department and the following conclusions arrived at:

(*a*) The Yellowtail Dam and Reservoir was specifically authorized and approved by the Congress as a part of the Flood Control Act of 1944.

(*b*) The previous opinion of this Department is largely based upon a provision of the act of June 8, 1946, which said:

"No further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe, (2) the irrigation district or districts affected, and (3) the Congress of the United States."

Taken alone and by itself, this language might be construed to prevent the construction of the Yellowtail Dam on the Crow Indian Reservation. An examination of that act and of its history, however, gives a different meaning to the language above set forth.

To understand the act, it is necessary to recall that there is an already existing Crow irrigation project on the reservation, and that the Crows had previously complained to the Congress that they were not in favor of the extension of that project; that they were being given irrigation systems which they did not want, to irrigate lands which they did not wish to irrigate, etc.

Attention should first be directed to the title of the act of 1946, which is "to provide for adjustments in connection with Crow irrigation project, Crow Indian Reservation, Mont." The act, therefore, obviously was intended to apply to the existing irrigation project, and no mention of the Yellowtail Dam is made in the title or the body of the act. Furthermore, this Department in its reports on the bill stated:

"Section 9 of the bill would prevent new construction on the Crow project without the prior consents and replacement contracts required thereunder."

Still further, the committee reports of the House and Senate indicate clearly that the Yellowtail Dam was not in the contemplation of the Congress in connection with the 1946 act.

It is considered most unlikely that this language, primarily relating to another matter, was intended, without any specific reference to it, to prohibit construction of the Yellowtail Dam, which Congress had just specifically author-

ized at the previous session. Certainly it is not to be lightly inferred that an act with this background and with no reference to the specific previous authorization of the Yellowtail Dam was intended, by language which is at least ambiguous, to repeal a specific authorization of the Congress.

(*c*) There can be no question that the United States possesses the inherent right of eminent domain in the lands required for the construction of this project, even though they be tribal lands of the Crows. To hold otherwise is to say that the Crow Nation holds land in a more sacred title than do any other land owners in the United States, including the States themselves and their political subdivisions.

(*d*) It also seems apparent that the United States has the authority to condemn the Indian tribal lands of the Crows and that further congressional action is not required. The Congress has specifically authorized the Yellowtail Dam as a reclamation and power development and has provided that in undertaking such projects the Secretary of the Interior shall be governed by the Federal reclamation laws (Flood Control Act of 1944, 58 Stat. 887). Section 7 of the Reclamation Act of 1902 (32 Stat. 388) grants specific authority to the Secretary of the Interior to acquire property in the name of the United States by condemnation when needed for a reclamation project. It is also pertinent that the Yellowtail Dam was one of the dams in the Missouri Basin for which appropriations for that general basin program have been made. It might be true that congressional action specifically reciting that the act of 1946 was not intended to affect the Yellowtail Dam would clear up the supposed ambiguity in the situation, but in my opinion such an ambiguity does not actually exist when proper evaluation of the background and purposes of the 1946 act is taken into consideration.

(*e*) If there is any validity in the views previously expressed by this Department to the effect that this 1946 act prohibits the construction of the Yellowtail Dam, it will be very simple indeed to plead that fact in an answer to the first condemnation suit that is brought, and the matter can then be judicially determined, a procedure which would probably result in any event, no matter what legislation the Congress might enact.

For all of the foregoing reasons, therefore, it is my opinion that there is authority in the Department to proceed with the construction of the Yellowtail Dam and to bring such condemnation actions as may be necessary under the provisions of the existing reclamation laws to acquire possession and title thereto.

CLARENCE A. DAVIS, *Solicitor.*

Mr. D'EWART. Mr. Chairman, I ask that by reference the Report on the Crow Indian Tribe Lands Required for Proposed Yellowtail Dam and Reservoir Project, Bureau of Reclamation, Bighorn River, Mont., Federal Power Commission, Bureau of Power, Division of Projects, of March 1950. I ask that be made a matter of record by reference.

Mr. HARRISON. Is there any objection?

The Chair hears none. It is so ordered. Are there further questions?

Mr. PILLION. What is the physical connection between the Hardin unit and the Yellowtail unit? How do they harmonize or what is the connection between them?

Mr. CLINTON. The first connection is that the Hardin unit requires a supply of storage water that can only be supplied by the Yellowtail Reservoir.

Mr. PILLION. I see.

Mr. CLINTON. Secondly, it permits a means of either gravity diversion or pumping diversion to the unit. A preferable plan as far as the irrigation unit is to make a gravity diversion outlet through the dam a hundred feet above river level on the abutment and deliver water directly into the canal.

Mr. PILLION. In other words, the two must go together, and you cannot take one and leave the other?

Mr. CLINTON. That is correct.

Mr. PILLION. One is dependent on the other?

Mr. CLINTON. That is correct, one is dependent on the other.

Mr. PILLION. Physicallly as well as financially?

Mr. CLINTON. That is correct.

Mr. D'EWART. Mr. Chairman, I suggest that immediately following Mr. Aandahl's letter the most recent opinion of the Solicitor concerning acquisition of reservoir sites on the Crow Indian lands be made a part of the record.

Mr. HARRISON. Without objection, it is so ordered.

Any further questions?

Thank you very much, Mr. Clinton.

Mr. CLINTON. Mr. Chairman, I would like to file these 2 statements for the record, 1 on Yellowtail and 1 on Hardin unit.

Mr. HARRISON. Without objection, they will be made a part of the record.

(The statements referred to follow:)

GENERAL STATEMENT, HARDIN UNIT, MONTANA, LOWER BIGHORN DIVISION, MISSOURI RIVER BASIN PROJECT

The Hardin unit comprises about 45,800 acres of benchlands just downstream from Yellowtail Dam in Bighorn County in south-central Montana in the vicinity of Hardin. Unit lands are shown in yellow and existing irrigated lands are shown in green on both the attached map and display chart.

Of the 45,800 acres, 44,000 acres are new lands and 1,800 acres are now irrigated from Soap Creek, an eastern tributary to Bighorn River, by an inadequate supply. About 40,000 acres lie on the west side of the valley and 5,800 acres lie on the east side of the valley.

PROJECT WORKS

The presently contemplated plan for serving irrigation water to these arable lands contains the following main features: Hardin pumping plant, West Canal, East Canal, War Man relift pumping plant, and War Man Canal.

Hardin pumping plant.—The pumping plant will be located on the left bank of the Bighorn River just below the mouth of the Bighorn Canyon, about 1 mile below Yellowtail Dam site. The plant will contain electric motor-driven pumps, with a total capacity of about 1,095 cubic feet per second pumped against a static head of about 90 feet. The intake for the pumps will be located in the backwater of the Yellowtail (Lime Kiln) Afterbay Dam, which reregulates the flows released from Yellowtail Dam.

West Canal.—The West Canal originates at the discharge end of the Hardin pumping plant and will extent along the west side of the Bighorn River for a distance of about 70 miles to serve an area of about 40,000 acres of benchland. Most of the lands to be served by this canal lie in a continuous strip 2 to 4 miles in width and about 42 miles in length. The canal will have an initial capacity of about 1,100 second-feet. Canal excavation will be mostly in earth and the principal structures will include 2 siphons and 3 major drops.

East Canal.—The East Canal takes off from the main or West Canal a few hundred feet below the end of the Hardin pumping plant discharge line, crosses the Bighorn River by an inverted siphon, then traverses about 10 miles eastward, furnishing water to about 2,100 acres of irrigable benchland above the existing Bighorn Canal. East Canal terminates at Soap Creek, but will discharge sufficient water into that creek to supplement the supply to about 1,800 acres with a supplemental water supply. Water destined for lands under War Man Canal are transported by the East Canal to the War Man relift pumping plant located beyond the discharge end of the siphon across the Bighorn River. The lands to have new irrigation under this canal are within a compact area lying a short distance below the mouth of Bighorn Canyon.

War Man pumping plant and canal.—War Man pumping plant relifts water from East Canal through a static head of about 60 feet to War Man Canal, which traverses eastward about 5 miles furnishing a full irrigation supply to about 1,900 acres of arable land lying between War Man and East Canals.

In addition to the works described lateral and drainage systems will be provided.

It should be recognized that the above-described plan for irrigation of the lands in the unit is based largely on a reconnaissance survey. When more detailed land classification surveys and engineering studies of alternate layouts of the canal system are completed, it may be found economical to include a somewhat larger acreage of land by locating the West Canal on grade through a greater portion of its length.

CONSTRUCTION COST

The estimated cost of construction of the distribution system for the Hardin unit, at January 1954 prices, is as follows:

Hardin pumping plant	$5,021,000
War Man pumping plant	146,000
Hardin canals and conduits	3,314,000
Hardin laterals	2,597,000
Hardin drains	2,436,000
Farm unit development	210,000
Total	13,724,000

Of the above costs, only those on Hardin pumping plant were based on feasibility standards, the remainder being reconnaissance type. More detailed investigation will probably reveal deficiencies in the estimate as well as more economical means of providing service; however, the above estimate is representative of the anticipated costs of construction for the entire distribution system as now laid out.

WATER SUPPLY

The annual irrigation requirement at the point of diversion for the irrigable lands of the Hardin unit is estimated to be 3.8 acre-feet per year, for a total diversion requirement in a dry year of about 170,00 acre-feet.

The Bighorn River is the only practicable source of water for irrigation of the Hardin unit. With full upstream development, as now contemplated, an active storage capacity of 95,000 acre-feet would be required to furnish Hardin unit lands with a full water supply without adverse effects on senior downstream water rights. Regulation afforded by Yellowtail Reservoir would be more than ample to provide these storage water needs.

LAND RESOURCES

Investigations of land resources to date consist of a soil survey made in 1938 under the auspices of a Montana Agricultural Experiment Station, Corps of Engineers, and the Bureau of Plant Industry, a reconnaissance land classification completed by the Bureau of Reclamation in 1939 and a deep-pit study made in 1952. These investigations and observations, substantiated by laboratory tests, clearly indicated the adequate arability of the lands of the Hardin unit.

Soils are quite variable, ranging from a heavy clay loam in the lower areas to a sandy loam in the upland areas. The greater part of the unit area is underlain with gravel at depths of 4 feet or more. Soil characteristics are quite favorable to sustained irrigation agriculture.

Drainage.—The pit study, conducted in 1952, consisted of 115 holes to determine if any serious drainage problems might exist with application of irrigation water. Based on the results of this study, it is the consensus of qualified personnel that no serious drainage problem should develop.

Land certification.—At the present time there is insufficient data available to make the certification as to the adequacy of soil survey and land classification, which is now required by permanent legislation.

AGRICULTURAL ECONOMY

Present situation.—Irrigation in the lower Bighorn Valley is already well advanced and irrigation practices have been established.

At the present time, there are 5 direct diversions from the Bighorn River below Yellowtail Dam serving irrigation water to approximately 43,000 acres. The combined ultimate irrigable acreage under existing works is estimated to

be about 53,700. Upland benches are mainly dry farmed, and the remainder of the area is used for grazing.

Ninety percent of the lands comprising the Hardin unit are devoted to dryland wheat, and 10 percent to grazing. Summer fallowing is practiced extensively. Production on lands cropped varies from a high of about 27 bushels of wheat per acre in the most favorable years to a low of about 4 bushels per acre in drought years. Average annual yield is 13 bushels per acre. Carrying capacity of the grassland is estimated to be 30 acres per head for year-round grazing.

In 1949, the Hardin unit area was divided among 22 operating units, varying greatly in size. Four of the largest operators controlled about 28,000 acres. About 27,000 acres of the unit lands are Indian owned; all of these lands have been allotted.

Anticipated situation.—An irrigated agricultural economy similar to that on existing irrigation projects along the lower Bighorn, Little Bighorn, and lower Yellowstone Rivers is expected to develop from the Hardin unit. With full development of the unit lands, about 290 new family-sized farms would be available. Production on these farms is expected to follow closely the pattern prevailing on nearby irrigated projects with similar climatic conditions. The principal crops to be grown would be alfalfa, sugar beets, barley, wheat, corn, and oats. Gross farm income of about $84 per acre is anticipated, which is an increase of $73 per acre over the present situation. This is based upon the anticipated long-range price level and the practice of 50 percent summer fallow for wheat production in the present situation.

Due to the large surrounding area of grazing land, the general area is devoted largely to production of grass-fattened cattle. Feed production is now pretty much in balance with carrying capacity of grazing land. Irrigation of the unit lands could provide feed to fatten about 19,500 beef cattle annually in the area, which would reduce the number of feeders now shipped out by about 40 percent.

In addition, transportation facilities are good and a modern sugar-beet factory is located at Hardin. These factors would be conducive to diversified cash crop production if desired. Byproducts from sugar-beet production would fit well into feeding enterprises.

Another result of irrigation is that it would reduce the area devoted to wheat from about 40,000 acres to 5,000 acres.

ANNUAL COSTS

Annual costs assignable to the Hardin unit include operation, maintenance, and replacement costs of the irrigation system, and an appropriate share of annual operation, maintenance, and replacement costs of Yellowtail Dam and Reservoir allocated to irrigation.

The pumping plan of diversion was adopted because increased power generation more than justified the increased costs over the gravity diversion. Annual operation, maintenance, and replacement costs to be paid by the irrigators are the same as would be required for the gravity diversion.

Annual operation, maintenance, and replacement costs assignable to the Hardin unit on the basis of present costs are estimated as follows:

	Per acre
Canal, lateral, and drainage systems	$2.00
Diversion works and canyon conduit	.44
Yellowtail Dam and Reservoir	.35
Total	2.79

Long-time average annual costs are considered to be 72 percent of present costs, making the anticipated annual operation, maintenance, and replacement costs of the Hardin unit $2 per acre.

ALLOCATION OF COSTS

Construction costs assignable to the Hardin unit include the cost of the irrigation system plus the allocation of construction costs of Yellowtail Dam and Reservoir to irrigation.

As the pumping plan of diversion was adopted rather than the gravity plan because of benefits to the power system, only the costs equal to those for the gravity diversion are to be assigned to the irrigation system. The pumping

plan costs $2,775,000 more than the gravity diversion. Consequently, the cost of the irrigation system for Hardin unit is allocated as follows:

Power	$2,775,000
Irrigation	10,949,000
Total	13,724,000

Total costs allocated to the Hardin unit are:

Irrigation system	$10,949,000
Yellowtail Dam and Reservoir	26,552,000
Total allocation to irrigation	37,501,000

Costs allocated to irrigation amount to $819 per acre.

IRRIGATION PAYOUT

The average annual payment capacity of lands comprising the Hardin unit has been estimated on a conservative basis at $6 per acre for new lands and $5 per acre for lands to receive supplemental water. With an average annual operation, maintenance, and replacement cost of $2 per acre this leaves $4 per acre to apply on repayment on new lands, and $3 per acre for supplemental lands.

Allowing a 10-year development period before repayment charges begin and a 40-year repayment period, a total of $7,256,000 would be repaid by the landowners. This would leave $30,245,000 to be returned from power revenues from the Missouri River Basin power system.

GENERAL STATEMENT, YELLOWTAIL UNIT, MONTANA AND WYOMING, LOWER BIGHORN DIVISION, MISSOURI RIVER BASIN PROJECT

Yellowtail unit, comprising the dam, reservoir, and powerplant, is a multiple-purpose development which would provide for conservation, control, and use of Bighorn River flows at the site. The dam site is located at the mouth of Bighorn Canyon in south-central Montana, 40 miles south of Hardin, Mont. The reservoir lies astride the Wyoming-Montana State line.

The unit is a key structure in a comprehensive plan of development of the Missouri River Basin project to be constructed, operated, and maintained by the Bureau of Reclamation under authority of section 9 of the Flood Control Act of 1944 (58 Stat. 887) and Senate Document 191, as modified by Senate Document 247, both 78th Congress, 2d session.

Primary purposes of the unit are irrigation, power production, and flood control. Other incidental uses to which important benefits attach are silt retention, improvement of fish and wildlife resources, and recreation. In addition it will facilitate administration of the Yellowstone River compact and contribute to a more uniform and desirable flow in the lower Yellowstone River Valley.

PREVIOUS INVESTIGATIONS

Previous studies and reports of a water-resource development in this area are: (*a*) Investigations by the Reclamation Service during 1903–05 for gravity diversion near the Yellowtail Dam site to a canal system along the west side of the river. (*b*) Investigations started in 1913 and a detailed report dated October 24, 1917, for the Bighorn Canyon Irrigation & Power Co., prepared by A. W. F. Koch, proposing the construction of a gravity arch dam of rubble concrete about 480 feet high and powerplant with 500 miles of transmission line and 62 miles of highline canals to irrigate 60,000 acres of benchland. (*c*) A report on the Bighorn Canyon irrigation and power project by G. W. Goethals, consulting engineer of New York City, dated May 16, 1917, propounding the economic practicabilities of the proposal. (*d*) A survey report, Yellowstone River, Wyo., Mont., and N. Dak., by the Corps of Engineers dated March 31, 1932, later published in House Document 256, 73d Congress, 2d session. (*e*) Bureau of Reclamation investigations of the Yellowtail Dam and Reservoir sites 1939–42 (project investigations report No. 81) later summarized and published in Senate Document 191, 78th Congress, 2d session, proposing a low dam at the Yellowtail site and one at the Kane site to be operated in conjunction with a combined total

installed capacity of 105,000 kilowatts. (*f*) review report on flood control and other purposes, Yellowstone River and tributaries, Wyoming, Montana, and North Dakota, in 1946 by the Corps of Engineers based on House Document 256. (*g*) definite plan report, Yellowtail unit, dated January 1950 (approved by the Commissioner, November 10, 1950) based on further detailed investigations, concludes that a single high dam at the Yellowtail site is more economical than the two dams at the Kane and Yellowtail sites.

ORIGINAL PLAN (S. DOC. 191)

The plan of development for the lower Bighorn River Basin, presented in Senate Document 191, consisted of two reservoirs requiring comparatively low dams and irrigation of Hardin Bench. One of the dams was to be at the upper end of the Bighorn Canyon near Kane, Wyo., and one at the present Yellowtail Dam site near the mouth of the canyon. The two reservoirs, with storage capacities of 750,000 and 470,000 acre-feet respectively, were to be operated in conjunction to provide for irrigation, power, silt retention and flood control. Powerplant capacities were to be 30,000 kilowatts at Kane and 75,000 kilowatts at Yellowtail.

Pertinent information on the two dams is:

	Kane	Yellowtail
Hydraulic height	143	370
Crest length	600	1,100
Type of construction	(1)	(2)

[1] Concrete, gravity.
[2] Concrete, arch.

The principal reason for selection of 2 reservoirs rather than 1 larger reservoir at the Yellowtail site was because reconnaissance information indicated a possibility of excessive leakage into the cavernous limestone forming the canyon walls. Sufficient funds were not available at that time to resolve this question by drilling and tunneling.

PRESENT PLAN

Subsequent explorations and detailed studies led to the conclusion that a larger reservoir at the Yellowtail site would hold water without excessive leakage. Detailed topographic surveys also disclosed an error of 15 feet in the datum from which elevations were taken for the original surveys of the two sites. Correction of this error resulted in reducing the capacity of the Kane site from 750,000 acre-feet to 610,000 acre-feet.

A reservoir at the Kane site would flood considerably more land in Wyoming and would require much more extensive highway and railroad relocations.

Comparative studies indicated that a combination of two dams would cost about $5 million more than a high dam at the Yellowtail site and annual costs would be more for the 2 structures rather than the 1. Consequently, the high dam at the Yellowtail site was adopted.

Detailed studies have led to adoption of reservoir capacities as follows:

Purpose:	*Volume (acre-feet)*
Flood control	259,000
Joint use, flood and conservation	250,000
Conservation	358,000
Minimum operating storage	508,000
Total	1,375,000

About 95,000 acre-feet of the conservation storage capacity is needed for irrigation of the Hardin unit.

The dam will be a concrete arch structure with the following dimensions:

	Feet
Structural height	518
Hydraulic height	494
Crest length	1,445

The spillway is a reinforced concrete structure with two 50-foot by 61.66-foot radial gates discharging into a 41-foot horseshoe section tunnel with a capacity of 173,000 cubic feet per second. The outlet works consist of two 84-inch diameter pipes, one for irrigation releases and the other for evacuation of the reservoir, each controlled by an 84-inch hollow jet valve after a 48-inch ring follower gate. With the water surface elevation at 3,547 feet the capacities of the irrigation outlet and the evacuation outlet are 3,460 and 3,580 second-feet, respectively.

An afterbay will be provided to smooth out diurnal fluctuations in river flows caused by powerplant releases. The afterbay dam is located 2.25 miles downstream from Yellowtail Dam site. It will be an earthfill and concrete structure with an ogee spillway, 201.5 feet long, controlled by 7 radial gates, and will provide reregulation and replacement diversion for the existing Bighorn Indian service canal. The dimensions are:

	Feet
Structural height	36
Hydraulic height	31
Crest length	1,320

The powerplant will be located on the toe of Yellowtail Dam and will have four units each with 50,000-kilowatt capacity. The maximum net head will be 459 feet.

Normal power marketing considerations would call for a powerplant at Yellowtail Dam with an installation of about 130,000 kilowatts. However, peaking power is at a premium in the Missouri River Basin system. Due to the high head and short penstocks, Yellowtail powerplant afforded an ideal opportunity for a peaking plant. Design of the powerplant, therefore, was based on operating the reservoir at sufficiently high levels to assure full peaking capacity from the powerplant at practically all times. Consideration of anticipated drawdown periods and their diversity with other reservoirs, together with probable excess capacity inherent in most turbine and generator manufacture, led to a decision that the powerplant machinery should be rated to produce the full 200,000 kilowatts only down to an operating head of 420 feet. Operation studies show that the head was permitted to be less than 420 feet only 3 times in a study period of 24 years, and the minimum head reached was 370 feet for a period of less than 1 month.

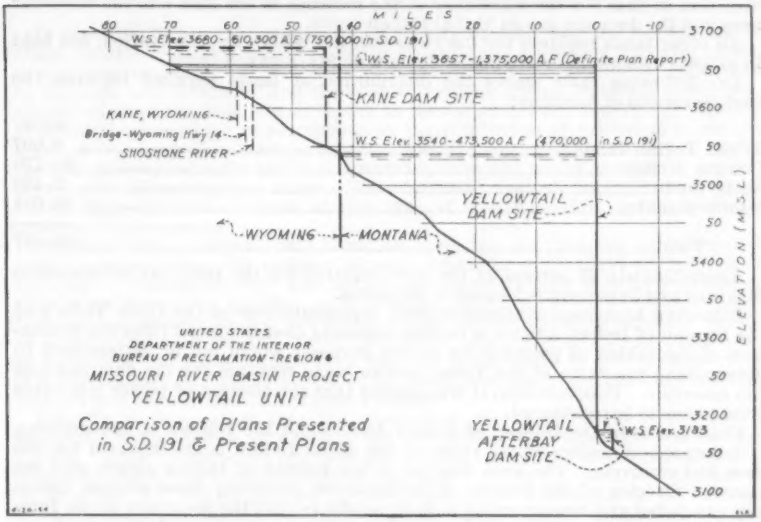
COMPARISON OF PLANS

A comparison of pertinent items of the plan presented in Senate Document 191 and the presently planned Yellowtail unit is:

	S. Doc. 191			Presently planned, Yellowtail
	Kane	Yellowtail	Total	
Hyd. height of dam.....feet..	143	370	.....	494
Total storage capacity.....acre-feet..	610,000	470,000	1,080,000	1,375,000
Powerplant capacity.....kilowatts..	30,000	75,000	105,000	200,000
Annual generation [1].....kilowatt-hours..	124,000,000	401,000,000	525,000,000	597,000,000

[1] Firm power with full upstream development.

The drawing following this shows a comparative profile of the two plans. The dotted-line profile shows the original plan and the solid-line profile the adopted plan.



PRESENT STATUS

Detailed studies have been continued since preparation of the definite plan report sufficient to permit advertising for bids on the access road and prime contract within 3 months after construction funds are made available.

The Bureau of Reclamation has expended a total of $2,533,000 to date in the engineering investigations relating to the Yellowtail unit.

Investigations completed since those leading to findings presented in S. D. 191 are:

Topographic surveys of Yellowtail Dam and Reservoir area; afterbay dam and reservoir area; borrow pit areas and the campsite location.

Explorations include about 19,000 feet of diamond drill holes, 1,500 feet of exploration tunnels, and 39 test pits.

Detailed studies were made for water supplies, power production, and flood control. In addition, detailed design studies have been made for the dam and powerplant, including trial-load analysis of the dam. Laboratory model studies have been made of the spillway and outlet works.

In addition, about 5 miles of (jeep) trail were constructed in the vicinity of the dam site to facilitate investigations.

The Lovell-Yellowtail 115-kilovolt transmission line, which will provide power during dam construction and later for transmission of power to the Bighorn Basin in Wyoming, has been partially completed. Due to a lack of funds construction on this line was suspended last summer.

LAND REQUIRED FOR DAM AND RESERVOIR

The site selected for the Yellowtail Dam and powerplant is located near the northerly end of the Bighorn Canyon. The reservoir area extends upstream from the site in a southerly direction and is, for approximately two-thirds of its length, within the confines of the canyon. A short distance south of the Wyoming-Montana State line, the canyon terminates and the reservoir spreads over farmlands of the Bighorn River Basin. At the extreme southerly end of the reservoir, the town of Kane, Wyo., will require relocation and the grade of the Chicago, Burlington & Quincy Railroad will require raising.

One of the major problems of acquiring lands needed for reservoir rights-of-way relates to lands owned by the Crow Indian Tribe. From the Montana-Wyoming State line northward for about two-thirds of the distance to the dam site, the Bighorn River marks the westerly boundary of the Crow Indian Reservation. At that point, the boundary of the reservation extends in a westerly

direction so that for the remainder of the distance to the dam site the reservoir area and the dam site are on Tribal Indian lands.

All other lands required for the reservoir, not within the reservation, are held in private ownership or are public domain or State-owned lands.

The following table shows the distribution of lands required between the various classes of holdings:

	Acres
Tribal Indian lands	6,997
Private lands	10,770
State lands	2,486
Public domain	10,604
Total	30,857

Approximately 42 percent of the land required for the reservoir is located in Montana and 58 percent is located in Wyoming.

Following numerous conferences with representatives of the Crow Tribe and the Bureau of Indian Affairs, it became apparent that the usual rules for evaluation of the taking of property for public purposes would not be satisfactory in determining the value of the Tribal Indian lands required for the dam site and the reservoir. Consequently, it was agreed that the element of power site value would have to be considered.

Field forces of the Bureau of Indian Affairs and the Bureau of Reclamation collaborated in studies of the value of the tribal Indian lands required for the dam and reservoir. The area director of the Bureau of Indian Affairs and the regional director of the Bureau of Reclamation, following these studies, mutually concluded and recommended to their superiors that the Secretary of the Interior offer to the Crow Tribe of Indians $1,500,000 for the tribal Indian lands required. This amount recognizes the element of power-site value but it also recognizes that the Crow Tribe is not the sole owner of all the lands required for the reservoir.

The Secretary of the Interior has made the offer of $1,500,000 to the Crow Tribe but the tribe has, through action of its tribal council, refused the offer.

CONSTRUCTION COSTS

During the past year a revised design has been completed and a new cost estimate prepared, based on specification quantities, which reflect the result of 3 years of detail design studies. These detailed studies resulted in modifications and refinements in design which reduced the previous estimate for the dam $7,601,000, the powerplant and switchyard $10,490,000, and general property $1,560,000. The detailed studies reduced the concrete volume of the dam some 570,000 cubic yards while those on the powerplant reduced the physical size of the powerhouse, turbines, and generators. The new official estimate for the Yellowtail unit is $95,721,000 exclusive of transmission facilities beyond the switchyard.

Yellowtail Dam and Reservoir (includes right-of-way and associated relocations)	$67,239,000
Yellowtail afterbay dam	1,585,000
Yellowtail powerplant	21,294,000
Yellowtail switchyard	2,579,000
General property	2,524,000
Recreational facilities	500,000
Total	95,721,000

It is anticipated that it would take about 6 years to complete construction of the dam, powerplant and appurtenant structures. Under an economic construction schedule, required appropriations would be about as follows:

1st year	$9,000,000	4th year	$25,000,000
2d year	19,000,000	5th year	11,000,000
3d year	25,000,000	6th year	4,188,000

Of the amounts given $2 million would be required for right-of-way the first year and $500,000 the second year.

PLANT CAPABILITY AND POWER PRODUCTION

In planning Yellowtail powerplant, it was recognized that an installation of about 130,000 kilowatts would probably be sufficient to assure the sale of the firm energy available. It was evident, however that the Yellowtail plant, due to the high head available and the economic advantage of installing short penstocks, afforded an ideal site at which to install additional generating capacity to assist the integrated power system in the production of salable firm energy. Some of the energy produced by other prospective powerplants will not fit under the firm power load curve of the integrated system and would necessarily be sold only for its off-peak energy value. The additional assured capability at Yellowtail permits the sale of much of this type of energy as firm power over the interconnected system.

Design of the powerplant was based on operating the reservoir at sufficiently high levels to assure full peaking capacity from the powerplant at practically all times. Consideration of anticipated drawdown periods and their diversity with other reservoirs, together with probable excess capacity inherent in most turbines and generators, led to a decision that the powerplant machinery should be rated to produce the full 200,000 kilowatts only down to an operating head of 420 feet. Operation studies show that the head might be less than 420 feet only three times in a study period of 24 years, and the minimum head reached was 370 feet for a period of less than 1 month.

Initially, it is expected that the powerplant will produce about 875,200,000 kilowatt-hours annually, of which, about 650 million kilowatt-hours will be firm energy. After ultimate upstream depletions for irrigation, estimated to be experienced about 50 years after initial generation, power production is estimated to be about 761 million kilowatt-hours annually, of which, about 597 million kilowatt-hours will be firm energy. Average annual power production for the first 50 years of operations will, therefore, be about 818,100,000 kilowatt-hours, of which, about 623,500,00 kilowatt-hours will be firm energy.

Since power produced at Yellowtail will be marketed on the interconnected projects power system, generation will be integrated with the energy produced at other powerplants. Deducting for average transmission losses, about 185,000 kilowatts of power will be available for sale at the loads, along with an estimated average annual firm sale of 576,738,000 kilowatt-hours and an average annual nonfirm sale of 180 million kilowatt-hours. These estimates represent salable energy at loads on the integrated power system.

POWER MARKETING

The marketing area.—The principal area in which power produced at the Yellowtail powerplant will be marketed comprises northern Wyoming, Montana east of the Continental Divide, and portions of western and northwestern North Dakota, as shown on the attached map. By virtue of existing and proposed interconnections between the major Bureau transmission systems it will also be possible to utilize Yellowtail power in augmenting power supplies in southern Wyoming and in the eastern portion of the Missouri River Basin.

Agriculture, mining, and industry are economic activities of the primary market area. In recent years the production, transportation, and refining of petroleum has assumed major proportions and its rapid expansion is continuing. Northern Wyoming has long been a substantial oil producing area, and the Williston Basin, a large part of which is located within the market area for Yellowtail power, promises to become one of the major oil producers in the Nation.

A large variety of minerals occurs, chiefly in the mountainous portions of the West. Coal reserves, for the most part subbituminous, are distributed broadly over the area. Favorable sites for synthetic liquid fuel plants offer prospects for large power loads. Natural gas reserves are substantial.

Power requirements and supply.—In analyzing the present and future power requirements and supply in the Yellowtail market area use was made of the report, Power Requirements and Supply, Missouri River Region, prepared by the Subcommittee on Electric Power of the Missouri Basin Interagency Committee. This report, published in May 1953, represents the coordinated efforts of representatives of investor-owned, municipal, public power, rural electric, and Federal utility systems, and is used as an impartial source of data in the ensuing presentation.

Present (1953) power requirements in the area, excluding exports, but including reserve requirements, are stated in the report as 517 megawatts. Adding

export commitments of 60 megawatts, a total requirement of 577 megawatts results, which is somewhat in excess of the effective generating capability in the area, amounting to 532 megawatts. The deficit is presently met by imports of power from southern Wyoming and Colorado, and by reliance on power supplies in western Montana outside the marketing area. Generating capacity, except for the 66,000-kilowatt steamplant at Billings, Mont., is located around the periphery of the area and therefore is not easily integrated. Integration is further limited by lack of transmission interties between the power systems in Montana and Wyoming. The Yellowtail powerplant, by virtue of its central location and associated transmission lines would provide means of integrating the existing systems.

The estimated future power requirements of the Yellowtail market area, together with estimated generation, are shown in the following tabulation for the years 1960, 1965, and 1970. These requirements are based on a very conservative load growth of 5 percent annually over the 17-year period, as estimated in the report. Commitments for export of power outside the marketing area are assumed to be five megawatts higher than at present.

This tabulation shows a need for additional power within the marketing area amounting to 138 megawatts in 1960, 264 megawatts in 1965, and 405 megawatts in 1970. On the above basis of power requirements, there should be a ready market for the output of at least three units of the Yellowtail powerplant by 1960 with the fourth unit required about 1 year later.

Estimated future power requirements of Yellowtail market area

[Data from Power Requirements and Supply, Missouri River Region, Missouri Basin Inter-Agency Committee, May 1953]

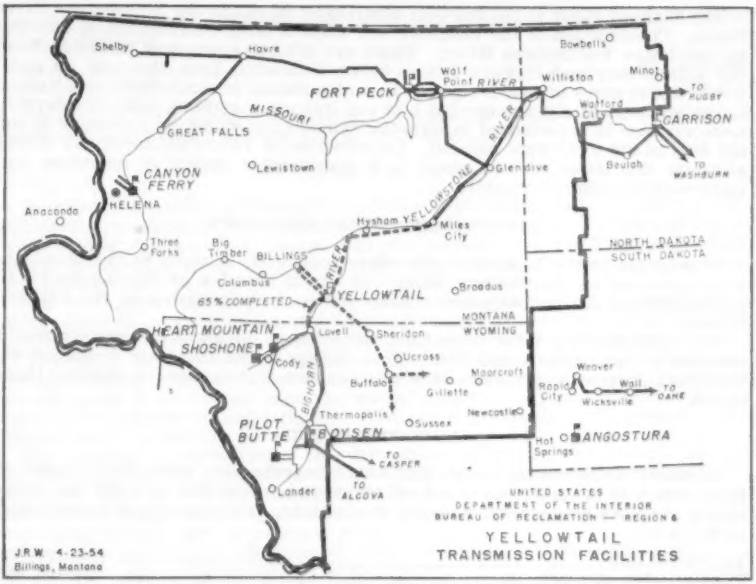
	Megawatts			Megawatt-hours		
	1960	1965	1970	1960	1965	1970
Peak load of area	696	846	1,028	3,737	4,489	5,324
Export commitment	65	65	65	285	285	285
Reserve	57	58	59			
Load plus reserve	818	969	1,152	4,022	4,774	5,609
Generating capability other than Yellowtail:						
Non-Federal, hydro	245	245	245	1,491	1,491	1,491
Non-Federal, fuel	205	230	272	1,344	1,512	1,790
Federal, hydro	230	230	230	1,594	1,510	1,507
Total capability	680	705	747	4,429	4,513	4,788
Additional firm supply required	138	264	405	(407)	261	821

FLOOD CONTROL

Storage requirements for flood control were established by the Corps of Engineers and set forth in a memorandum report. They concluded that 250,000 acre-feet of space reserved solely for flood control, and another 250,000 acre-feet of space to be used jointly with conservation purposes, would fulfill the flood control needs. In designing the reservoir, the above amounts of storage, plus an additional 9,000 acre-feet, were provided for the flood control function. Operation studies show that this 509,000 acre-feet of flood storage capacity would control all floods of record to safe channel capacity. It would also control the reservoir design flood, having a total volume of 2,044,000 acre-feet and peak discharge of nearly 60,000 cubic feet per second, to a maximum outflow of 20,000 cubic feet per second. The Corps of Engineers have estimated that flood control benefits will average $210,000 annually from operation of the reservoir.

RECREATION

The National Park Service has studied the proposed Yellowtail Reservoir area and has concluded that, because of its outstanding scenic character and excellent fishing potentialities, it is expected to influence a sizable area in southern Montana and northern Wyoming. The primary zone of interest is estimated to comprise and area within an average distance of about 50 miles from the shore of the reservoir. The cities included in this area, particularly Billings, Mont., have



grown considerably since 1940, and it is believed that upon completion of the reservoir the population of the region in general will expand when full benefits from irrigation and power are realized. Primary annual benefits of about $109,000 would accrue from an estimated expenditure of $500,000. Over a 50-year period this annual amount, capitalized at 2½ percent, would amount to about $3 million.

FISH AND WILDLIFE

The Fish and Wildlife Service has studied the Yellowtail and Hardin units and has embodied its findings in a report on Fish and Wildlife Resources in Relation to the Water Development Plan for the Hardin Unit, Bighorn River, Mont. and Wyo., dated June 1948. That agency concluded that after development, limited areas of the reservoir should be attractive to aquatic animals. The potential fishery of the reservoir will be greatly increased if access to the reservoir margin can be facilitated. The development as planned will be beneficial to fish and wildlife. Annual benefits to these resources from development of Yellowtail unit are estimated to be $50,400.

SEDIMENT CONTROL

Both the Wind River Basin and the central Bighorn Basin are prolific sources of sediment. Erosion is more apparent in the southeastern portion of the drainage basin and in other localized areas where barren wastelands or badlands appear.

The average annual sediment estimate of 5,600 acre-feet at Thermopolis was taken as the inflow to Boysen Reservoir, since the intervening canyon contributes very little sediment. The trap efficiency of Boysen Reservoir is estimated at 95 percent or about 5,300 acre-feet. Deduction of this amount from the estimate of 9,100 at Kane, and addition of 750 acre-feet for the Shoshone River, gives an average annual inflow of 4,550 acre-feet to the Yellowtail Reservoir.

Practically all of the silt entering the reservoir will be retained. In a period of 100 years about 455,000 acre-feet of silt would be deposited in the reservoir. Much of this sediment would be deposited in the 508,000 acre-foot inactive portion of the reservoir. About 69 years would elapse before sediment will begin to impair the use of the reservoir.

The Bighorn River is the heaviest contributor of silt in the Yellowstone River Basin. Construction of the reservoir will make a large contribution to clearing up the lower Yellowstone River. There are 201,140 acres now irrigated from the Yellowstone and Bighorn Rivers below Yellowtail Dam site, and an additional 61,340 acres of new irrigation is contemplated in the Yellowstone Valley. Large amounts of silt are carried into the irrigation systems, and considerably more expense is experienced in cleaning canals than would be necessary if the silt load in the river were reduced. Construction of Yellowtail Reservoir should alleviate this situation and result in a considerable saving in operation and maintenance costs to irrigators.

EFFECT ON DOWNSTREAM RIVER FLOWS

A reservoir at the Yellowtail site offers a physical solution to the interstate water problem on the Bighorn River and would afford a practical solution to administration of the Yellowstone River compact as it applies to the Bighorn River.

The more uniform river flows that operation of Yellowtail Reservoir would produce in the Bighorn and Yellowstone Rivers would facilitate irrigation diversions and result in a lower cost of maintenance of structures on or along those rivers.

ALLOCATION OF COST

Inasmuch as Yellowtail is one unit of a comprehensive basin development, it is necessary to include costs of related transmission facilities to make the necessary allocations of costs and financial evaluations. These costs are summarized as follows:

Yellowtail unit	$95,721,000
Transmission division	24,494,000
Total construction cost	120,215,000

During the past decade various methods have been used in making allocations of cost. Several of these methods have been used on Yellowtail unit, with varying results. During the past month the Department of the Interior prescribed the separable costs-remaining benefits method as being preferable. This method is approved by the Federal Interagency River Basin Committee. In applying this method of allocations, the following single-purpose alternatives were assumed:

Power.—A privately financed steam plant with a capacity of 180,000 kilowatts, located in the vicinity of Forsyth, Mont.

Irrigation.—A reservoir at the Yellowtail site with a total capacity of 550,000 acre-feet; 95,000 acre-feet of active capacity for irrigation and 455,000 acre-feet for silt accumulation.

Flood control.—A reservoir at the Yellowtail site with a total capacity of 955,000 acre-feet; 500,000 acre-feet for flood control and 455,000 acre-feet for silt accumulation.

Application of the separable costs-remaining benefits method results in the following allocation of construction costs:

Irrigation	$26,552,000
Power	67,203,000
Flood control	4,241,000
Recreation[1]	500,000
Total	98,496,000

[1] Cost of facilities only.

Total power costs are:

Power allocation, Yellowtail unit	$67,203,000
Transmission division	24,494,000
Total	91,697,000

It is estimated that about 25 percent of the kilowatt installation of the Missouri River Basin project will be needed for irrigation pumping, the cost of which is

noninterest bearing. Applying this factor, the following breakdown of power costs is obtained:

Interest bearing	$68,773,000
Noninterest bearing	22,924,000

Capitalized net benefits or justifiable investment for flood control amounted to $5,806,000 as compared with the allocation of $4,241,000.

POWER PAY OUT

In order to demonstrate financial feasibility of the Yellowtail unit power development a pay-out study has been prepared on a 50-year basis, exclusive of basinwide project relationships, except that the transmission facilities and power output are considered as being integrated into the interconnected power system. The pay-out study is inserted at the end of this statement.

The investment components of the power development include the capital costs allocated to power at site and a proportionate amount of the interconnected project transmission system based upon the ratio of installed generating capacity at Yellowtail to total system capacity. This investment was suballocated into interest-bearing commercial electric plant and non-interest-bearing irrigation electric plant in accordance with the use estimated to be made of system power capacity by commercial and irrigation demands respectively, or 75 percent to the former and 26 percent to the latter.

For purposes of determining the disposition of energy, the average annual ultimate firm energy generation of Yellowtail, after allowance for transmission losses, was divided in accordance with the basinwide average into firm commercial and irrigation pumping sales. Thus, 12.7 percent of total firm energy was assigned to irrigation pumping sales.

The approved interim schedules of rates for wholesale firm power service for the Missouri River Basin project have been used in the study. This schedule of rates requires payment of a capacity charge of $0.75 per month per kilowatt of billing demand, or $9 per kilowatt per year, and a monthly energy charge of 3.5 mills per kilowatt-hour for the first 250 kilowatt-hours per kilowatt of billing demand and 3 mills per kilowatt-hour for the balance used. Under this schedule of rates, the total charge averages 5.5 mills per kilowatt-hour at 50 percent load factor. However, inasmuch as the Yellowtail powerplant is designed to provide system peaking and consequently has a higher kilowatt installation that normally required to dispose of the firm energy, it is assumed that all firm energy will be sold under the 3.5 mill block of the schedule of rates. The revenues for firm energy were therefore calculated on the basis of $9 per kilowatt and 3.5 mills per kilowatt-hour.

The capital and annual repayment obligations for the Yellowtail unit were divided so as to recognize the Hardin unit irrigation costs which would obtain under alternate plans of development. The most economical plan for providing irrigation water would be by gravity diversion from the Yellowtail Reservoir. This plan would reduce total power production from that attainable under the proposed plan whereby maximum utilization of falling water would be achieved by running all water through the powerplant and then pumping the irrigation water back to the required elevation for diversion. The latter plan proved most economical from an overall standpoint and was selected. However, irrigators were considered obligated only to the extent of those lesser costs which might have been incurred by the gravity diversion method. In the proposed plan, an amount of $2,775,000 was added to the separable power capital costs representing the excess capital costs of the pumping installation over gravity diversion costs. Also for the same reason, an operation and maintenance differential of $35,200 was added to annual power costs, and pumping energy sales were reduced by $44,300, the amount required to pump water into the West Canal for the Hardin unit.

Estimated reimbursable power development costs

Separable costs		$34,666,000
Powerplant	$21,294,000	
Switchyard	2,579,000	
Afterbay Dam	1,585,000	
Other separable costs	6,433,000	
Hardin unit pumping plant differential	2,775,000	
Transmission system [1]		24,494,000
Allocation of joint costs		32,537,000
Total power costs		91,697,000
Less 25 percent for interest-free investment		22,924,000
Commercial electric plant investment		68,773,000

[1] Proportionate share of Missouri River Basin project transmission system.

Estimated annual operating costs

Operation and maintenance:	
Specific power, including transmission	$561,950
Joint works, allocated to power	9,330
Hardin unit operation and maintenance differential	35,200
Total operation and maintenance	606,480
Replacement reserves:	
Specific power, including transmission	468,824
Joint works, allocated to power	25,253
Total replacement reserves	494,077

Financial feasibility summary

Gross revenue		$208,970,550
Revenue deductions:		
Operation and maintenance	$30,787,660	
Replacement reserve	25,075,575	
Subtotal deductions		55,863,235
Net operating revenues		153,107,315
Commercial power investment	68,773,000	
Interest charges	45,311,695	
Subtotal		114,084,695
Net surplus in 50 years after meeting requirement of repayment of commercial power investment		39,022,620
Interest-free investment in Yellowtail unit (suballocation of power costs to irrigation)		22,924,000
Net surplus in 50 years after meeting requirements for repayment of total power investment		16,098,620
Interest charges collected		45,311,695

CONCLUSION

The above analysis demonstrates that the Yellowtail unit is economically and financially feasible under the approved interim schedules of rates for power service in the Missouri River Basin project.

Mr. HARRINGTON. Mr. Colin Raff will be the next witness.

At this time the Chair states he has received a statement from Hon. Lee Metcalf of the First District of Montana, and also a certified copy of the Montana Senate Joint Memorial No. 4 regarding the Yellowtail Dam, and ask unanimous consent these be made a part of the record.

POWER SYSTEM REPAYMENT S
YELLOWTAIL UNIT
MISSOURI RIVER BASIN PROJECT

1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Sales of Electric Energy				Operating Revenue				Revenue Deductions			
Year of Study	Fiscal Year	Irrigation Pumping	Firm Commercial	Non-Firm	TOTAL (Col. 3+4-5)	Irrigation Pumping (2.5 Mills)	Firm Commercial ($9.00 per kw plus 0.005 per kwh)	Non-Firm (3.0 Mills)	TOTAL (Col. 7+8+9)	Operation, Maintenance and Overhead	Provision for Replacement	TOTAL (Col. 11+12)	NE OPER REVE
		(Millions of kilowatt-hours)											
0	1960	18.0	933.1	156.2	607.2	700	2 764 250	468 600	3 233 550	463 660	370 535	834 235	2 399
1	61	24.0	577.3	208.3	809.6	15 700	3 685 550	624 900	4 326 150	606 480	494 100	1 100 580	3 225
2	62	28.6	571.7	207.1	807.4	27 200	3 665 850	621 300	4 314 450				3 213
3	63	33.2	566.1	206.0	805.3	38 700	3646 350	618 000	4303 050				3 202
4	64	37.8	560.5	204.8	803.1	50 200	3626 750	614 400	4291 350				3 190
5	1965	42.4	554.9	203.7	801.0	61 700	3 607 150	611 100	4279 950				3 179
6	66	47.0	549.3	202.5	798.8	73 200	3 587 550	607 500	4268 250				3 167
7	67	51.6	543.7	201.4	796.7	84 700	3 567 950	604 200	4256 850				3 156
8	68	56.2	538.1	200.2	794.5	96 200	3548 350	600 600	4245 150				3 144
9	69	60.8	532.5	199.1	792.4	107 700	3528 750	597 300	4233 750				3 133
10	1970	65.4	526.9	197.9	790.2	119 200	3 509 150	593 700	4222 050				3 121
11	71	70.1	521.2	196.8	788.1	130 950	3489 200	590 400	4210 550				3 109
12	72		520.2	195.6	785.9		3485 700	586 800	4203 450				3 102
13	73		519.2	194.5	783.8		3482 200	583 500	4196 650				3 096
14	74		518.2	193.3	781.6		3478 700	579 900	4189 550				3 088
15	1975		517.2	192.2	779.5		3475 200	576 600	4182 750				3 082
16	76		516.2	191.0	777.3		3471 700	573 000	4175 650				3 075
17	77		515.2	189.9	775.2		3468 200	569 700	4168 850				3 068
18	78		514.2	188.7	773.0		3464 700	566 100	4161 750				3 061
19	79		513.2	187.6	770.9		3461 200	562 800	4154 950				3 054
20	1980		512.2	186.4	768.7		3457 700	559 200	4147 850				3 047
21	81		511.2	185.3	766.6		3454 200	555 900	4141 050				3 040
22	82		510.2	184.1	764.4		3450 700	552 300	4133 950				3 033
23	83		509.2	183.0	762.3		3447 200	549 000	4127 150				3 026
24	84		508.2	181.8	760.1		3443 700	545 400	4120 050				3 019
25	1985		507.2	180.7	758.0		3440 200	542 100	4113 250				3 012
26	86		506.2	179.5	755.8		3436 700	538 500	4106 150				3 005
27	87		505.2	178.4	753.7		3433 200	535 200	4099 350				2998
28	88		504.1	177.3	751.5		3429 350	531 900	4092 200				2 991
29	89		503.1	176.2	749.4		3425 850	528 600	4085 400				2 984
30	1990		502.1	175.0	747.2		3422 350	525 000	4078 300				2 977
31	91		501.1	173.9	745.1		3418 850	521 700	4071 500				2970
32	92		500.1	172.7	742.9		3415 350	518 100	4064 400				2963
33	93		499.1	171.6	740.8		3411 850	514 800	4057 600				2957
34	94		498.1	170.4	738.6		3408 350	511 200	4050 500				2944
35	1995		497.1	169.3	736.5		3404 850	507 900	4043 700				2937
36	96		496.1	168.1	734.3		3401 350	504 300	4036 600				2930
37	97		495.1	167.0	732.2		3397 850	501 000	4029 800				2923
38	98		494.1	165.8	730.0		3394 350	497 400	4022 700				2916
39	99		493.1	164.7	727.9		3390 850	494 100	4015 900				2910
40	2000		492.1	163.5	725.7		3387 350	490 500	4008 800				2903
41	01		491.1	162.4	723.6		3383 850	487 200	4002 000				2896
42	02		490.1	161.2	721.4		3380 350	483 600	3994 900				2889
43	03		489.1	160.1	719.3		3376 850	480 300	3988 100				2882
44	04		488.1	158.9	717.1		3373 350	476 700	3981 000				2875
45	2005		487.1	157.8	715.0		3369 850	473 400	3974 200				2868
46	06		486.1	156.6	712.8		3366 350	469 800	3967 100				2861
47	07		485.1	155.5	710.7		3362 850	466 500	3960 300				2854
48	08		484.1	154.3	708.5		3359 350	462 900	3953 200				2847
49	09		483.1	153.1	706.4		3356 200	459 300	3946 450				2841
50	2010	70.1	482.1	151.9	703.9	130 950	3352 350	455 100	3938 400	606 480	494 100	1 100 580	2833
TOTAL		3269.0	26019.8	9 163.1	38 451.9	$913 200 (1)	135 568 050	27 489 300	28 930 550	30 787 460 (2)	25 035 575	55 863 235	153 10

Notes:

(1) Irrigation pumping revenues (Column 7) excludes $44,300 annually, representing energy requirements of Hardin Unit delivered without charge because development plan of Yellowtail includes pumping plant for Hardin Unit, which increases power production, rather than gravity diversion for Hardin Unit.

(2) Annual O&M costs of power system $35,200, representing a portion o plant assumed by the power syste irrigators. Calculated as the in over what they would have paid in diversion development.

STUDY

REGION 6
YELLOWTAIL UNIT

ECT

14	15	16	17	18	19	20	21	22	23	24	25
NET OPERATING REVENUE	Income Deductions Repayment of Investment: Interest 3%	Principal	Investment Repayment from Power Revenue: Interest Bearing: Commercial Electric Plant	Interest Bearing: Balance to be Repaid	Interest Free: Irrigation Electric Plant	Interest Free: Balance to be Repaid	Allowable Unpaid Balance: Commercial Electric Plant	Allowable Unpaid Balance: Irrigation Electric Plant	EARNED SURPLUS (Cumulative)	Fiscal Year	Year of Study
			$1 281 250		17 093 250		$1 281 250	17 093 250			
2 399 315	1 538 438	860 877	68 773 000	67 912 123	22 924 000		68 773 000	22 924 000	0	1960	0
3225 570	2 037 364	1 188 206		66 723 917						61	1
3213 870	2001 718	1 212 152		65 511 765						62	2
3202 470	1965 353	1 237 117		64 274 648						63	3
3 190 770	1928 239	1 262 531		63 012 117						64	4
3179 370	1890 364	1 289 006		61 723 111						1965	5
3167 670	1851 693	1315 977		60 407 134						66	6
3156 270	1812 214	1344 056		59 063 078						67	7
3144 570	1771 892	1372 678		57 690 400						68	8
3133 170	1730 712	1402 458		56 287 942						69	9
3121 470	1688 638	1432 832		54 855 110						1970	10
3109 970	1645 653	1464 317		53 390 793						71	11
3102 870	1601 724	1501 146		51 889 647						72	12
3096 070	1556 689	1539 381		50 350 266						73	13
3088 970	1510 568	1578 462		48 771 804						74	14
3082 170	1463 154	1619 016		47 152 788						1975	15
3075 070	1414 584	1660 486		45 492 302						76	16
3068 270	1364 769	1703 501		43 788 801						77	17
3061 170	1313 664	1747 506		42 041 295						78	18
3054 370	1261 239	1793 131		40 248 164						79	19
3047 270	1207 445	1839 825		38 408 339						1980	20
3040 870	1152 250	1888 220		36 520 119						81	21
3033 370	1095 604	1937 766		34 582 353						82	22
3026 570	1037 471	1989 099		32 593 254						83	23
3019 470	977 798	2041 672		30 551 582						84	24
3012 670	916 547	2096 123		28 455 459						1985	25
3005 570	853 664	2151 906		26 303 553						86	26
2998 770	789 107	2209 663		24 093 890						87	27
2991 620	722 817	2268 803		21 825 087						88	28
2984 820	654 753	2330 067		19 495 020						89	29
2977 720	584 851	2392 869		17 102 151						1990	30
2970 920	513 065	2457 855		14 644 296						91	31
2963 820	439 329	2524 491		12 119 805						92	32
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ystem (Column 11) are increased by
tion of the annual costs of the pumping
ystem, rather than the Hardin Unit
he increased annual costs to irrigators
id in annual costs under a gravity

(3) Investments (Columns 17 and 19) were increased to recognize that irrigators pay no more on construction charges on the development which included pumping to Hardin Unit than they would have paid under the development which included gravity diversion. In this revision, Hardin Unit pumping plant construction cost differential in excess of gravity diversion was added to separable costs of power, and Hardin pumping plant annual cost differential in excess of gravity diversion, plus cost of irrigation pumping energy, were deducted from power values to determine power's justifiable investment.

J.M.V.V.
Billings
April 19, 1954

Revised April 23, 1954

Revised - Washington DC.
R.W.S. 4-28-54

Mr. D'EWART. Mr. Chairman, may I inquire whether the memorial and the statement are favorable or unfavorable?

Mr. HARRISON. The statement of Congressman Metcalf is favorable and the memorial is favorable.

The Chair would also like to say that we have a letter from Senator Murray, which is also favorable, and which without objection will be made a part of the record at this point also.

(The statements referred to follow:)

UNITED STATES SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
April 26, 1954.

HON. WILLIAM H. HARRISON,
Chairman, Irrigation Subcommittee, Interior and Insular Affairs Committee, House Office Building, Washington 25, D. C.

DEAR CONGRESSMAN HARRISON: It has come to my attention that your subcommittee will in the next few days hear testimony to be presented by those who are interested in seeing the construction of Yellowtail Dam undertaken in the near future.

You are doubtless aware that the congressional delegation from Montana has attempted for several years to obtain congressional appropriations to be used in carrying forward work on this particular project. It is my hope that your subcommittee, after conducting hearings on Yellowtail, will be in a position to recommend that supplemental funds be made available this year in order that we can proceed with the construction of this most important unit of the Missouri Basin project.

I have testified on Yellowtail before the House Appropriations Subcommittee for several years, and have also enjoyed the opportunity to speak in behalf of this project before your own legislative committee in the past. There is little more than what has already been said that could be added to the record at this time. However, I shall appreciate your entering into your hearing records this letter, and would request that there also be printed with my letter a message I sent to President Eisenhower on March 3 which deals with the Yellowtail project. A copy of my letter to the President is enclosed.

Sincerely yours,

JAMES E. MURRAY.

UNITED STATES SENATE,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
March 3, 1954.

HON. DWIGHT D. EISENHOWER,
The President, The White House,
Washington, D. C.

DEAR MR. PRESIDENT: I am writing to urge that the Yellowtail Dam in southeastern Montana be put under construction this year. It can be done if you would include it in a supplemental appropriations request to the Congress. I respectfully request that such action be taken now.

The Solicitor of the Department of the Interior on February 5 ruled that the project is fully authorized. There is need to make funds available for settlement of Indian claims for rights-of-way, approximating $1.5 million. Bureau of Reclamation has indicated in the past that at least $7 million could be wisely expended in the first year of construction since access roads, some housing facilities and other preliminary work has already been done.

There are many reasons for starting Yellowtail at once. The construction expenditures would help to stop the decline and restore the level of economic activity in the area. Beyond that immediate objective, Yellowtail Dam is the key to a great deal of potential, permanent economic expansion in southeastern Montana.

Yellowtail Dam would permit extension of irrigation and bring in a supply of low cost power for pumping on several irrigation projects. The Bureau of Reclamation has indicated that it will not have power for the increasing needs of preference customers in the general area after 1956–57. Yellowtail, with an initial installation of 120,000 kilowatts, would help to meet that need just a

few years ahead of us. It can be connected into the western Missouri Basin grid with less than 50 miles of transmission line, I am advised, or into the eastern Missouri Basin system with about 100 miles of line, making the project a key one for the possible interconnection and interchange of power between the eastern and western systems.

Additionally, Yellowtail Dam is in an area of mineral deposits, including chromite, molybdenum, copper, lead, zinc and others which might be developed if low-cost Federal power were available. Our State has repeatedly urged this dam because "an abundance of low-cost power would result in a marked increase in ratio of industrial development to agriculture", and consequently, a better balanced economy.

Details of this project are readily available from the Bureau of Reclamation. Its immediate construction would, in my opinion, be advisable in any circumstances. The current need for stimulating the economy makes it doubly justifiable at this time.

With assurances of my high esteem, I remain

Sincerely yours,

JAMES E. MURRAY, U. S. S.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D. C., April 29, 1954.

HON. WILLIAM H. HARRISON,
Chairman, Reclamation Subcommittee,
House Committee on Interior and Insular Affairs.

DEAR COLLEAGUE: I will appreciate having the enclosure read into the Yellowtail Dam hearing record this date.

Very truly yours,

LEE METCALF.

STATEMENT OF REPRESENTATIVE LEE METCALF ON YELLOWTAIL DAM

I am happy to join my colleagues from Montana in urging construction of Yellowtail Dam in the Big Horn River near Hardin, Montana.

Yellowtail Dam would bring irrigation water to 225,000 acres of fertile land. Its initial installation of 120,000 kilowatts would help meet the growing power needs of preference customers in the area. You remember, of course, that the Bureau of Reclamation has applications from preference customers for more power than it can supply.

Yellowtail Dam also would permit development of an area rich in mineral deposits.

Adequate reimbursement of the Indians for the loss of their tribal lands would remove the major objection to this project.

Yellowtail Dam already is fully authorized. Work should begin at once.

As evidence that Montanans favor the project, I append Senate Joint Memorial No. 4 enacted by the 33d session of the Montana Legislative Assembly and approved by Gov. J. Hugo Aronson on February 28, 1953.

UNITED STATES OF AMERICA,
State of Montana, ss:

I, Sam W. Mitchell, secretary of state of the State of Montana, do hereby certify that the following is a true and correct copy of an act entitled Senate Joint Memorial No. 4, enacted by the Thirty-third session of the Legislative Assembly of the State of Montana, and approved by J. Hugo Aronson, Governor of said State, on the 28th day of February 1953.

In testimony whereof, I have hereunto set my hand and affixed the great seal of said State.

Done at the city of Helena, the capital of said State, this 18th day of June A. D. 1953.

[SEAL]

SAM W. MITCHELL,
Secretary of State.

A memorial to the Congress of the United States and to Dwight D. Eisenhower, President of the United States; Hon. James E. Murray and Hon. Mike Mansfield, United States Senators for Montana; Hon. Wesley A. D'Ewart and Hon. Lee Metcalf, Congressmen for Montana; Hon. Douglas McKay, Secretary of the Interior, requesting the introduction and enactment into law of the necessary and proper legislation authorizing that sufficient appropriations be provided the Bureau of Reclamation for the compensation of the Crow Indians for the dam site and storage area, and the immediate beginning of construction of Yellowtail Dam located in Big Horn County in southern Montana

Whereas Yellowtail dam site is located on the Big Horn River in Big Horn County in southeastern Montana, and the Yellowtail Dam will be constructed across the Big Horn River about three-fourths of a mile above the mouth of Big Horn canyon about 35 miles southwest of Hardin, Mont., and 44 miles southeast of Billings, Mont.; and

Whereas the Bureau of Reclamation was authorized by section 9 of the Flood Control Act of 1944, as an integral part of the Missouri River Basin project to prepare preliminary surveys for the construction of Yellowtail Dam; and

Whereas the Bureau of Reclamation has completed preconstruction surveys and work necessary for full construction work, and said surveys—including those of the Bureau of Indian Affairs, the Public Power Commission, and other interested Federal agencies are now in the hands, or are ready to be placed in the hands of the Secretary of the Interior, to be presented by him to the Congress and the President of the United States; and

Whereas the Yellowtail powerplant, as projected, will have an installed capacity of 200,000 kilowatts with an estimated annual firm energy capacity averaging 584 million kilowatt-hours. In addition to this firm energy, the Yellowtail powerplant is expected to have an average annual nonfirm output of 163,920,000 kilowatt-hours, bringing the average total estimated production to approximately 748 million kilowatt-hours; and

Whereas such power is urgently needed to supply existing and rapidly expanding power needs in southeastern Montana and northeastern Wyoming for irrigation pumping, rural electric cooperatives, and other public bodies, and for commercial and industrial uses as well as for defense industry; and

Whereas irrigation is one of the additional contributions Yellowtail Dam will make to the economy of the area, and that of the Nation as a whole. Approximately 45,000 acres of irrigable land will be placed under the ditch by waters made available by Yellowtail Dam. In addition, there are a number of desirable pumping units along the Big Horn, Tongue, Powder, and Yellowstone Rivers that will be made feasible by low cost power derived from Yellowtail Dam, which will serve to irrigate some 180,000 additional acres, or an approximate total of 225,000 acres of fertile land will be brought into production of food essential to our Nation's oncoming wartime needs; and

Whereas Montana has an immense and mostly undeveloped mineral wealth that should be contributing to our Nation's defense program. (Herbert Hoover has stated that Montana possesses a greater mineral potential than the U. S. S. R.). The time may come, before this emergency shall pass, when Montana's minerals may be desperately needed. The low-cost power, that Yellowtail Dam will provide, will be a tremendous asset in bringing these minerals to a usable stage; and

Whereas Yellowtail Dam, in addition to providing hydroelectric power and irrigation, will also bring a vast contribution to flood control, silt, and soil control, conservation of fish and wildlife, recreational development, and other related and beneficial uses too numerous to mention for the benefit of all mankind; and

Whereas Yellowtail Dam will be an arch-type, concrete structure, towering about 500 feet above the river bed, with a crest of 1,480 feet, and a storage capacity of some 1,366,000 acre-feet, and will flood about 27 square miles of almost totally unusable land. The lake so created by Yellowtail Dam will extend for 75 miles through tortuously winding, steeply walled canyons, flooding land that is of no economic value. Yellowtail Dam will be exceeded in size only by Boulder, Shasta, Grand Coulee, and Hungry Horse in the order named, and will cost approximately $100 million which, by the sale of power, irrigation, and other benefits will be repaid to the Federal treasury through a 50-year period, and

Whereas the various governmental agencies together with the Crow Indian Council representative have made appraisals of the value of the lands required for dam and storage sites and a general coordination of the respective appraisals

has been made, but no money has been appropriated for site acquisition: Now, therefore, be it

Resolved, by the Thirty-third Legislative Assembly of Montana of 1953, now in session, the Senate and House of Representatives concurring, That the Congress of the United States be respectfully urged and requested to make such funds immediately available that may be necessary to compensate the Crow Indians for the dam site and storage area and to start construction of Yellowtail Dam in Big Horn County in southeastern Montana at once; and be it further

Resolved, That the Crow Tribe, upon whose lands the site of Yellowtail Dam is situated, be adequately and fairly compensated for the site at a price agreed upon by the Federal Power Commission, the Bureau of Indian Affairs, the Bureau of Reclamation, and the Crow Tribe; and be it further

Resolved, That a copy of this memorial be transmitted by the Secretary of State of the State of Montana to the Honorable Richard M. Nixon, President of the Senate; the Honorable Joseph W. Martin, Jr., the Speaker of the House of Representatives; the Honorable Douglas McKay, Secretary of the Interior; each of the Senators and Representatives in the Congress of the United States from the States of Montana and Wyoming; the Commissioner of the Bureau of Reclamation; the Commissioner of the Bureau of Indian Affairs; the Governors of the States of Wyoming and North Dakota; and the presiding officers of both Houses of the Wyoming and North Dakota Legislatures.

GEORGE M. GOSMAN,
President of the Senate.
DEAN CHAFFIN,
Speaker of the House.

Approved: February 28, 1953.

Mr. D'EWART. Mr. Chairman, I have a statement from John W. Haw, director, department of agricultural development, Northern Pacific Railway Co., which is favorable to the project and which I would like to make a part of the record.

Mr. HARRISON. Without objection, it is so ordered.

(The statement referred to follows:)

STATEMENT OF JOHN W. HAW, DIRECTOR, DEPARTMENT OF AGRICULTURAL DEVELOPMENT, NORTHERN PACIFIC RAILWAY CO., ST. PAUL 1, MINN.

Mr. Chairman, Committee on Interior and Insular Affairs, we favor the reauthorization of the so-called Yellowtail Dam on the Big Horn River and urge your committee to so recommend.

Others more directly concerned will, no doubt, testify as to the benefits to south central Montana from the standpoint of the Yellowtail Dam's addition to the electric power supply seriously needed if the area's future needs are to be met fully. They will say that it will augment an inadequate water supply for existing irrigation projects on both the Yellowstone and the Big Horn Rivers. In years of low runoff this additional supply will be critically needed. They will testify as to the provision of an irrigation water supply also for a small acreage of lands now dry-farmed and, further, that it will reduce flood hazards along the Yellowstone and diminish present serious bank erosion. It will contribute substantially to the desilting of the Big Horn above its confluence with the Yellowstone to the benefit of downstream irrigation projects, municipal water supplies and reservoirs on the main stem of the Missouri. To the validity of all these contentions, we heartily subscribe.

This testimony is specifically directed to the question of the dam's effect on the overall economy of south central and southeastern Montana.

The economy of the area is based primarily on agriculture—largely a range livestock agriculture. Unfortunately the rainfall is not only sparse on the average, but is subject to extreme variation from year to year. The utilization of the range is dependent almost wholly on adequate and reliable production of winter livestock feed supplies and supplies to carry breeding herds and flocks through intermittent periods of extreme drought, which may occur at any time during the year. In this section of Montana and Wyoming a relatively small percentage of the land area is under cultivation, and the remainder is in native range grasses which can only be harvested by grazing livestock. There is a complete dependence for these winter and drought-period feed supplies on the necklaces of irrigated lands which border the streams of this semiarid country.

The existing irrigated land area in this section does not now provide the required feed to support present breeding herds during either a short and acute

drought or one of greater length but of less severity. Small additions to the irrigated land in this part of Montana—and this is all that would be accomplished in the construction of the Yellowtail Dam—is needed urgently to buttress the livestock industry against the ever-present threat of subnormal rainfall. Both more power and more water are needed to accomplish this end. Present diversions for irrigation along the Big Horn and the Yellowstone woud, in low runoff years such as were experienced in 1934 and 1936, practically dry up these streams.

In light of both water and power supply in the Yellowstone and Big Horn Basins no further irrigation is feasible. It will require reasonably priced power, generated near at hand, to lift water from stream courses to the lower benches where soils and topography favor irrigation. And there must be a reliable flow of water in the main channel of the Big Horn and Yellowstone. This can only come from storage at high stages of the rivers for later release during periods of low flow. By thus smoothing out stream flow in the erratic Big Horn and with the contribution of power from a hydroelectric plant at the Yellowtail Dam to the grid in southeast Montana, many small engineeringly feasible projects of self-liquidating character under existing reclamation law, scattered over a wide area, can be programed and built.

It is hoped that your committee will not allow their appraisal of the Yellowtail Dam project to be colored by the much discussed surplus of farm products. The present balance sheet of production and consumption of agricultural produce has slight if any connection with what is here proposed. If the production of the lands to be irrigated in southeast Montana has any relationship with the situation nationally—which is doubtful—then it must be considered in the light of the national supply and demand situation 10 or 15 years hence. Years are required to build dams and canal systems, more years to settle and develop the land and yet again more years before these projects develop beyond the point where farm products are made available to markets beyond the project horizons. This has been the history of all projects and holds especially true on projects developed in primarily range areas in northern latitudes. The products which are adapted to production on irrigation projects of the Northern Plains States are largely livestock feed adjuncts such as alfalfa, pastures, oats, barley, corn for silage, and some sugar beets. To the extent that dry-farmed benches along the rivers are brought under irrigation in this section, they come out of wheat and go into crops as to which there is now no surplus nor are surpluses threatening in the future.

It is to be hoped that your committee will take the view that this project should or should not be authorized depending upon its contribution to the economic well-being and long-time stability of the immediate region served by its facilities. On such basis we are persuaded to believe that the project will have your approval, with construction to begin when the Congress concludes that fund should be made available.

We urge adoption of a report which recommends reauthorization of the Yellowtail Dam project.

Mr. SULLIVAN (Administrative Assistant to Senator Mansfield). Mr. Chairman, I have a statement from Senator Mansfield for the record at this time.

Mr. HARRISON. Is it favorable or unfavorable?

Mr. SULLIVAN. Favorable.

Mr. HARRISON. Without objection, it will be received and made a part of the record at this point.

(The statement referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
April 29, 1954.

Hon. WILLIAM H. HARRISON,
Chairman, Subcommittee on Reclamation of the
Interior, and Insular Affairs Committee,
House of Representatives,
Washington, D. C.

DEAR MR. CHAIRMAN: It is my understanding that your subcommittee is conducting hearings today and tomorrow on the feasibility of the Yellowtail Dam project in Montana.

It was my intention to appear personally before your committee on one of these days but due to the fact that I am home in bed with a cold it is impossible for me to get down to the office. Therefore, I am taking the liberty of sending this letter to you with the request that it be made a part of the record. As you know, while I was a Member of the House and since coming to the Senate, I have been doing all I could in behalf of this particular project which has been authorized many years.

It is my belief that this project should have been started long ago because this project would be of great benefit to the development of southeastern Montana. The Yellowtail Dam would be the beginning of a permanent economic expansion in that part of the State and it would permit the extension of irrigation and bring in a supply of low-cost power for pumping on several irrigation proects. This proposed project is in an area of mineral deposits which I feel could be developed if low-cost Federal power were available. Senator Murray and I have repeatedly tried year after year to get this dam underway, having appeared before the various appropriations committees in support of a request to include funds. It is my intention to appear before the Senate Interior Appropriations Subcommittee and request that they include funds. If this cannot be done, it is my hope that the President will include a request in a supplemental appropriations bill that funds be appropriated to get this project going.

I am not going into details of the costs or all the technical phases of this project because I feel there will be others who have already given such information to your committee, but I would like to urge that your committee recommend that this project get underway, and if possible, this year.

Thanking you and with best personal wishes, I am

Sincerely yours,

MIKE MANSFIELD.

Mr. HARRISON. Proceed Mr. Raff.

STATEMENT OF COLIN RAFF, EXECUTIVE ASSISTANT, THE MONTANA POWER CO., BUTTE, MONT.

Mr. RAFF. Mr. Chairman and members of the committee, my name is Colin Raff. I am executive assistant of the Montana Power Co. We desire to make a very brief statement in connection with this series of hearings.

First, I would like to tell you just a little bit about us so that you will know our interest in the matter.

The Montana Power Co. is an independent utility owned by nearly 36,000 stockholders, including more than 11,500 Montana residents who own our stocks. It supplies electric energy to 181 communities and surrounding rural areas in a 90,000 square mile area of the State. Approximately 448,000 people, or nearly 70 percent of the State population, rely on the company for electric service. We have 129,229 electric customers, of whom 108,500 are domestic and farm consumers.

Within our service area we sell electric energy to 15,000 direct farm customers, and we supply wholesale power to 12 REA cooperatives, representing approximately 15,000 additional farm users. REA cooperatives in our service area served by the Bureau of Reclamation within the Missouri Basin marketing region represent about 7,700 customers.

The Montana Power Co.'s wholesale rates to the REA cooperatives is identical with the Bureau of Reclamation rate in Montana and in the Missouri Basin without regard to the $7.20 capacity charge that has been referred to in recent statements of the Bureau. Prior to that time we had an identical rate. If that capacity charge were added, our rate would be somewhat lower.

The revenue from the company in 1953 from its REA customers averaged 4.99 mills per kilowatt-hour. Between 97 and 98 percent of the farms in our service area now have electric service.

We own and operate 12 hydroelectric plants and 1 steam electric generating station, and the generating capability on our system totals 526,000 kilowatts, including 410,000 kilowatts of hydro, 66,000 kilowatts of steam, and 50,000 kilowatts of power under firm power contract with the Bonneville Power Administration. We are now completing a third generating plant at our Kerr hydroelectric plant in western Montana which will add about 60,000 kilowatts to our system later this year.

For many years the Montana Power Co. has purchased surplus power as available from the Fort Peck project of the Government in northeastern Montana, and it is now purchasing power from the Bureau of Reclamation's Canyon Ferry project pending a final determination of the amount of power that will be available from that project.

Chairman MILLER. May I ask a question at that point, sir?

Mr. RAFF. Yes, sir.

Chairman MILLER. What is the average that you pay per kilowatt for the power you buy at Fort Peck?

Mr. RAFF. I understand, Congressman, we are not buying any at the present time, but we have for a number of years. That is a dump power that we buy, and it is 2½ mills per kilowatt-hour.

Chairman MILLER. 2½ mills?

Mr. RAFF. Yes.

Chairman MILLER. You call it dump power?

Mr. RAFF. Yes.

Chairman MILLER. That is obtained from the Bureau of Reclamation at Fort Peck. You said you were buying some from them?

Mr. RAFF. At Canyon Ferry.

Chairman MILLER. At Canyon Ferry?

Mr. RAFF. Yes. I am not sure. I think that has been the rate we have been paying at Canyon Ferry.

Chairman MILLER. Do you know if that is at the bus bar or on the end of the line?

Mr. RAFF. Maybe Mr. Clinton could check me. We take it at—I believe from Fort Peck, and we take it at—the Bureau has a transmission line from Canyon Ferry to East Helena and it enters our system at East Helena.

Chairman MILLER. How far is it removed from the source of origin?

Mr. RAFF. I believe the East Helena delivery point is about 5½ miles.

Chairman MILLER. How much power do you get that you call dump power? How many kilowatts?

Mr. RAFF. I do not have that information, Congressman. I could provide it.

Chairman MILLER. It occurs to me that inasmuch as the power must be used to help pay for the project, that if the power is sold at less than cost of production, it is going to be rather difficult to have power pay much on the irrigation project. Do you know what it

costs to produce power at Fort Peck? Do you think they are producing it at 2½ mills?

Mr. RAFF. I do not have any information on their power costs, but we do not have any firm power commitments from them. We buy dump power as it is available, as it can be generated, rather than push it over the dam.

Chairman MILLER. I wondered what percentage of the power being generated there is labeled dump power.

Mr. RAFF. I do not have that information, sir.

Chairman MILLER. Would there be someone here later who could answer such questions?

Mr. D'EWART. Mr. Chairman, my understanding is the contract with Fort Peck is that the Montana Power furnishes power to Fort Peck when they need it to firm up their plant. In other words, if the plant closed down, Montana Power picks up the whole load, and they reverse—anytime that Fort Peck has power not otherwise marketable, that is, no purchaser, then the power company contracts to take that. In other words, it is a mutual agreement. It firms up the power at Fort Peck and the power that goes to the company is only such that is not needed by any customer.

Mr. RAFF. It is my understanding, Congressman, and I believe that very nearly all of the firm power from Fort Peck is transmitted eastward, which is in an opposite direction from our system.

Chairman MILLER. Is that sold at 5½ mills?

Mr. RAFF. At 5½ mills with 50 percent load factor; yes, sir.

Chairman MILLER. I think it is quite necessary, I think the Appropriations Committee feels it is necessary to have a reevaluation and study of the production and sale of electrical energy. I am concerned that so many projects in the Missouri River Basin development cannot be made feasible unless we have a power rate which reflects some help for irrigation. I assume that as the demand for power grows there will be less reason for selling what we call dump power. I believe out at Bonneville on our hearings on power it was developed that a tremendous amount of power was sold to private industry at so-called dump rates, but they used it as firm power, at far less than the cost of production, with no withdrawal clause for preference customers.

Mr. RAFF. Yes, sir.

Chairman MILLER. If that pattern followed in the past is to be followed in the future, we can kiss goodby the irrigation project development in the Missouri Basin or any place else.

I think in California 2 weeks ago the committee found that the power from Shasta Dam was being sold at perhaps less than 2 mills, and I contend that they cannot produce power at 2 mills and put it on the line.

Now someplace along the line we probably ought to have a new study as to whether the Government is subsidizing large power companies or private industry or anyone by selling electrical energy at less than the cost of production. If that continues generally over the Missouri River Basin—and perhaps 5½ mills is right. I am not sure. But it certainly has brought into jeopardy and into question some of the irrigation projects we have been hoping to develop that will use electric energy to help pay for the cost of irrigation. In some projects in my State we are depending on electrical power

returns from the Missouri Basin to pay the larger share of the cost of the irrigation projects.

Mr. RAFF. Yes, sir.

Chairman MILLER. You see what I mean?

Mr. RAFF. Yes, sir. I should explain in connection with Canyon Ferry that we have made an application to the Bureau to purchase power from that project after the requirements of the preference customers have been met, at terms and under conditions that we could agree upon with the Bureau. We have assumed that there would be some firm power in that, but we have not had a chance to sit down with the Bureau to find out how much.

Chairman MILLER. What would you pay for firm power?

Mr. RAFF. We would pay the Bureau rate. That would be the rate that they have for all of their projects in that area.

Chairman MILLER. Of course, it is only natural when the Bureau has power for sale they must have power that they have to sell, and perhaps the dump rate is justified, although it takes machinery to produce power, and if the wearing out of the machinery is caused by the production of power that is sold at so-called dump rates, it is not economically sound because you wear out your machinery in making something to sell at less than the cost of production, and so you replace the machinery later on to produce more power to sell at less than the cost of production. You get on a merry-go-round. It does not make sense as far as finances are concerned.

Mr. D'EWART. Mr. Chairman?

Mr. HARRISON. Mr. D'Ewart.

Mr. D'EWART. The testimony yesterday shows that the first estimate based on present flows, speaking of the Yellowtail-Hardin unit, assuming there would be no depletion at all, the plant would produce about 650 million kilowatt-hours of firm power annually, about 225 million kilowatt-hours of secondary energy, for a total of 875 million kilowatt-hours annually. The testimony this morning, based on the 50-year payout schedule, shows that will give a profit over the 50-year payout period of some $60 million on this project before us to be applicable to irrigation.

Chairman MILLER. I am glad to have that information.

Mr. RAFF. To continue, I should say now that at present there is a surplus of power in the Montana Power Co.'s area in line with our policy of continuing to stay ahead of the requirements of our customers, and that this has been the situation for a number of years.

We have about 3,650 miles of high tension transmission lines and 7,450 miles of distribution lines to serve our customers. We now have under construction a 161,000 volt transmission line between Anaconda and Billings which will provide additional integration between the eastern and western regions of our system. That line is 223 miles long.

We have planned our transmission system so that every region has an adequate power supply and that all major load centers have dual or multiple sources of power.

The company is seriously interested in reclamation and in irrigation for the reason that Montana is primarily an agricultural State with approximately half its income being devoted to and derived from farm crops and livestock production. We believe that sound

economically feasible irrigation projects are very important to the State's economy.

The Montana Power Co. has not adopted an official position on the Yellowtail project and has not studied carefully any of the aspects of its feasibility. We understand that one of the purposes of this hearing is to bring up to date all of the financial and engineering studies in connection with Yellowtail to form a basis for considering its need and its feasibility. If Congress determines that Yellowtail project is economically sound and should be built, the Montana Power Co. would like to consider participation in the power features of the project under the Government's partnership program.

We believe that a workable partnership arrangement will first reduce the burden on the Federal budget; second, benefit the taxpayers by avoiding heavy Federal expenditures and placing new property on the tax rolls; and, third, conform to the Government's policy of leaving to local interests the responsibility for power supply in the area.

The company is in a position to create for the Yellowtail project the widest possible market for its power. The energy can be taken into the company's system and can be distributed over existing facilities to the largest possible number of domestic and rural customers in the area. We would be in position in the event Yellowtail is constructed to plan our own generation construction schedule so that a market for the power would exist when Yellowtail's production became available.

At the present time we have a surplus of about 75,000 to 80,000 kilowatts, which amount is sufficient to supply present requirements on our system, plus anticipated growth during the next 5 years. If Yellowtail were not to be built, our company would construct additional generating plant capacity between now and 1959 in accordance with our policy of having surplus power for the area at all times.

In summing up, I should say that we are prepared to investigate a partnership arrangement with the Government for the development of power if the project should be approved for construction. We are prepared to create the widest possible market for Yellowtail power consistent with the situation which exists in the area. Thirdly, we would plan our own construction schedule with the view of creating the best possible market situation for Yellowtail project, if and when it were approved and constructed.

That completes my statement.

Mr. HARRISON. Any questions from the committee?

Mr. D'EWART. What is the closest point at which you have a transmission system that connects with the Yellowtail powerplant?

Mr. RAFF. We have several lines, Congressman, into Billings, Mont., which I understand from the testimony yesterday is about 40 miles north, and we also have a transmission line into Hardin, Mont., which is about 40 miles northeast of Yellowtail.

Mr. D'EWART. Therefore, it would take about 40 miles to connect this into your transmission system?

Mr. RAFF. That is correct.

Mr. HARRISON. Mr. Berry?

Mr. BERRY. No questions.

Mr. HARRISON. Mr. Pillion?

Mr. PILLION. You say that you have enough surplus power to take care of your needs for the next 5 years. Is that right?

Mr. RAFF. Yes, sir.

Mr. PILLION. And after that you contemplate constructing additional generating capacity. What type of generating capacity do you have in mind—a steam plant or hydro?

Mr. RAFF. We have one or two hydro sites yet to be developed that can be developed. I should add that we were advised, I believe it was yesterday or the day before, that the Federal Power Commission had granted us a preliminary permit to investigate a site on the Flathead River called Buffalo Rapids.

Mr. PILLION. And of course those are probably less economical than the present hydro plant you have. Do you have any estimate of the cost of generating power for your new facility, or your contemplated facilities? What would be the cost of that power?

Mr. RAFF. I do not have the information on the proposed or new facilities. I could tell you that at the Kerr plant, which is our largest hydro unit and one of our newest, and where we are now making an addition, it is in the neighborhood of $100 per kilowatt.

Mr. PILLION. $100?

Mr. RAFF. Yes.

Mr. PILLION. And that works out into a cost of kilowatt-hours on a mill basis of how much, do you know?

Mr. RAFF. I do not have that information.

Mr. PILLION. Do you have any idea of what the cost of electricity per kilowatt-hour would be?

Mr. RAFF. I do not have the information on the production costs per kilowatt-hour.

Mr. PILLION. Mr. Berry would like to know how it compares with what the Bureau sells it for. I do not quite get the question, Mr. Berry. You ask it.

Mr. BERRY. How does your cost now compare with what you buy from the Bureau, the purchase price?

Mr. RAFF. We, of course, as I said, our average revenue to the REA cooperatives last year was 4.99 mills per kilowatt-hour. That is the revenue we got from the power we sold them, which was firm power. What surplus power or dump power we have bought, we have bought at 2½ mills. Most of that power is taken to Washington, Oregon, and Utah at times when they need it.

Mr. BERRY. The Kerr plant is your own plant, is it not?

Mr. RAFF. Yes, sir.

Mr. BERRY. And what did you say the cost was on that?

Mr. RAFF. The construction costs will run about $100 per kilowatt.

Mr. BERRY. I see. But you do not have it broken down?

Mr. RAFF. I am sorry I do not have the information as to how much it costs us per kilowatt-hour to produce power there. It is quite a low figure, but I do not have it accurately.

Mr. BERRY. Could you get that for us?

Mr. RAFF. I will do the very best I can to get that information for you.

Mr. BERRY. I would like to have it as a matter of comparison. Thank you.

Mr. PILLION. What would be the cost estimated in the Yellowtail project here to produce one kilowatt? You gave the figure of $100 in your privately owned plant. What is the cost in this Yellowtail project? Do you have any idea?

Mr. RAFF. I do not have that information.

Mr. PILLION. That is per kilowatt-hour, whether it is a hundred or two hundred dollars. Does anyone have that?

Mr. RAFF. I should say, Congressman, I had not seen or known about the construction costs of Yellowtail until I heard Mr. Clinton testify yesterday.

Mr. PILLION. In other words, I am trying to find out what the cost of construction of Yellowtail hydroelectric facility would be on the basis of cost per kilowatt-hour of production of electricity.

Mr. MCFARLAND. Something over $400 including transmission facilities. I have not figured it exactly.

Mr. D'EWART. Will the gentleman yield?

Mr. PILLION. Yes.

Mr. D'EWART. Mr. McPhail is in the audience. He is the power man and I am sure can give us the figure.

Mr. MCPHAIL. My understanding is $336 per kilowatt.

Mr. RAFF. I probably should explain, when I referred to the Kerr plant, we built the first unit in 1938, I believe the second unit in 1949, and are now completing the third unit. They will all average out, but that includes construction that has gone on previously.

Mr. PILLION. What makes the differential between your ability to build facilities at $100 per kilowatt-hour and the Yellowtail project the Government proposes which would cost $336 investment in plant machinery to produce one kilowatt-hour?

Mr. RAFF. I do not have enough information to make a comparison. I could say this, Congressman, that I think most power men will agree that at the Kerr site we have one of the best natural sites in the country.

Mr. PILLION. I see.

Mr. HARRISON. Mrs. Pfost, do you have any questions?

Mrs. PFOST. I would like to say to the gentleman—probably one of the reasons for the difference in cost would be because you naturally would choose first, the most feasible sites, those that would be most economical to construct, then those that were left, such as the Yellowtail site, is more difficult, more expensive from the standpoint of construction. Would that not be part of the difference in cost?

Mr. RAFF. Congresswoman, I will agree with you that the earlier hydro sites—naturally the ones which have been built first have been the most economical, and they are getting less economical for everyone as they go along. Naturally, on the early ones we always, all of us, picked the best sites possible when we first started building.

Mrs. PFOST. I was not clear on the point in which you stated that you sold to the REA's at 4.99 mills last year, and that where you purchased the power that was surplus or dump power, if I understood correctly, that it was bought at 2½ mills.

Mr. RAFF. Yes, ma'am.

Mrs. PFOST. What do you assume your power costs you overall? That is if you forget about the surplus from the Government. In other words, what is the difference in your costs and what you retail it to the REA's for?

Mr. RAFF. I am sorry. That is the same question that the Congressman asked me, and I do not have that information. I will try to get it.

Mrs. PFOST. Thank you.

Mr. RAFF. We do not sell—you could not say, I do not believe, that we buy dump power from the Bureau at 2½ mills and turn around

and sell it to the cooperatives at 4.99 mills. One is not dump power. Sometimes you have it, sometimes you do not. The power contracts we have with the REA cooperatives are for firm power. They have that power all the time.

Mrs. PFOST. Yes, I understand that. Thank you.

Mr. HARRISON. Thank you very much, Mr. Raff.

Mr. RAFF. Thank you very much. I appreciate your courtesy in letting me make this statement.

Mr. HARRISON. I see that Senator Murray is in the room. Does the Senator wish to make any statement at this time?

Senator MURRAY. No, Mr. Chairman. I did not come over to make any statement. I have already written you a letter.

Mr. HARRISON. It has already been made a part of the record.

Senator MURRAY. Thank you. I am just present to hear the statements being made by the delegation from Hardin, Mont., who I understand will be heard this morning.

Mr. HARRISON. Thank you, Senator. Your letter has been made a part of the record.

Senator MURRAY. Thank you.

Mr. HARRISON. Mr. H. W. Bunston.

Mr. D'EWART. I would like to say, Mr. Chairman, that Mr. H. W. Bunston is an old friend of mine, and long before I came to Congress he and I used to appear before committees in behalf of appropriations for the Missouri Basin. He has long been interested in irrigation. When I first knew him he was an attorney at Hardin. Now he is retired and lives in Billings.

STATEMENT OF H. W. BUNSTON, BILLINGS, MONT.

Mr. BUNSTON. Thank you, Congressman D'Ewart. I might say that I am rather tired rather than retired.

Mr. Chairman, my name is H. W. Bunston; I have lived in the Hardin-Billings area since 1913. During those years I have taken an active interest in irrigation and agricultural developments.

On January 30, 1941, a hearing was held in Billings by the Engineers of Rivers and Harbors which crystallized the individual thinking of over 200 people who attended that hearing. Before that meeting, the upper area was threatened with having its water taken for navigation purposes. At that meeting there was under consideration a report prepared for submission to the Flood Control Committee of the House on flood control of the upper Yellowstone and its tributaries. General Grant III was chairman and stated the purpose of the meeting was to find out what we wanted, why we wanted it, and our justification for wanting it. The evidence was unanimous to the effect that floodwater should be stored in the upper river areas and released in lower flow periods—that the water should be made available for domestic purposes first, then for irrigation purposes, then power, wildlife, recreation, and lastly navigation. Our Governor Ford testified as follows: "It is needless to say that this question is one of vital importance to Montana and that we are vitally interested. Our primary purpose, our primary interest is irrigation."

Robert Yellowtail testified in part as follows:

> Try to realize as I stand here this moment, that the Macedonian cry of the people of Montana and of Wyoming is for water, water, water, and more water;

water in the irrigation ditches so that the farmers may raise their stock and so that our mixed farming operations in Montana and Wyoming may proceed. Everybody in this room is dependent on the stockman and the farmer for our living no matter what capacity we may be serving in our community.

During 1943 and 1944 following the reports of the Army and Bureau, extensive hearings were held, culminating in the Pick-Sloan plan of the Missouri Basin geing adopted by the Congress. Time will not permit reciting the many projects completed since that time. On the Yellowstone, 1 storage is planned, 1 on the Powder and 2 on the Bighorn Rivers. The Boysen on the Bighorn in Wyoming has been built and is in operation and we believe is doing everything hoped for. The Bighorn storage (Yellowtail Reservoir) near the mouth of the Bighorn Canyon in Montana is yet to be built. That is why we are here now. When authorized, it was considered the key project of the Yellowstone Basin on account of its multiple uses, its large irrigation benefits, its hydroelectric power possibilities, and its flood control and silt arresting features were then and still are its principle objectives.

As time has gone on and new developments have come into use, more and more attention has been focused on the Hardin unit. In order to clarify the conditions, we suggest:

First, the area is the same, the interest of our people is even greater. The stream flow is about the same and the storage above has been increased through construction of Boysen Reservoir. An anticipated amount of silt has been arrested. Valuation of the dam site has been made and offer has been made to the Crow Indians. Preliminary work on the Bighorn Project has been about completed. A compact between affected States has been made and approved by all interested States and the Federal Government.

The item of irrigable area to be benefited seems not to have been fully determined. Based on our information, the 44,000 acres heretofore reported by the Bureau is not the full ultimate irrigable acreage to be had under the project. We suggest that in our opinion the one survey that can be depended upon is the Gesicker survey made for the Montana Agricultural Experiment Station in conjunction with the War Department and the Bureau of Chemistry and Soils, USDA.

The forward in this 1938 report states:

The survey covered about 500,000 acres of which 100,000 acres was found to be irrigable and another 30,000 to 40,000 having irrigation possibilities, providing the land can be properly drained. This acreage comprises some of the best land remaining in the State for irrigation development and in connection with the present irrigated land in the Valley of Big and Little Horn Rivers, it would cover and area 3 to 6 miles wide extending along the Valley of the Bighorn from the mouth of the Bighorn Canyon for 60 miles or more. Should the table lands below the mouth of the Canyon also be placed under irrigation, the area would be over 9 miles wide in the southern part.

In the light of this report, we wish to urge that every door be left wide open in the planning of this project, with no obstacles to prevent the full ultimate irrigable acreage development without hindrance or excessive cost to the land owners. We wish to state further that it has been our observation that the plan for a dam structure has since 1944 been changed in design to omit a diversion from the dam level which would permit irrigation by gravity flow and in its stead is a plan to use all water for power-generating purposes and install pumps at the toe of the dam to pump water up for irrigation.

The people of the Bighorn County area feel that their principal benefit from the dam will be full ultimate irrigation development. At the present time, we have in our county only two percent of our 3,200,000 acres irrigated. We have 2,900,000 acres of grazing land and in order that we have a balanced agricultural economy, it is vital that we have five percent irrigated. Therefore we urge that nothing be permitted to place irrigation secondary in this development project.

About 5 years ago over 50 percent of the irrigable land in question was Indian owned, today over 60 percent of the land is white owned. No matter what the future course of ownership takes, one thing is sure, that is, that the value of irrigated land will warrant any reasonable expenditure required to apply the water to it. This will, of course, include a proper charge for storage and diversion. However, these charges must be spread over a term of years and payments scheduled in relation to earnings from the land. Others will present to you what increased irrigated acreage will mean to us in area earning.

The 308 Flood Control Report states that 21,200,000 tons of silt pass Hardin annually and that 51 percent of the silt entering the Missouri from the Yellowstone and its tributaries comes from the Bighorn River. We believe that it is recognized that these benefits are national in interest and scope and should be liberally considered in determining who should pay for the cost of the Hardin project. The transformation of the Missouri Valley from its earlier liability status to an asset status certainly concerns our National Government. It would seem that with our increasing population a development which would furnish an opportunity to live and work would be our Nation's concern. Montana has a population of 3½ persons per square mile, while our more congested States have populations of hundreds per square mile.

It seems to us that this committee would be wise to fully explore the immediate area value of the Bighorn development and its developed effect on the Basin. Certainly the elimination of 21,200,000 tons of silt annually from the Bighorn River would have a controlling effect on the life of the main stream storages and finally affect the port of New Orleans. Then, too, to be considered should be the Boysen expenditure and the fact that that expenditure was predicated and justified somewhat on the basis of the Montana Bighorn development being realized. To us the question is, will the project be worth the expenditure in the light of the purpose and cost of the whole Missouri development program?

There have been some statements made concerning the location of the Bighorn Dam in Montana. Some years ago the people of Wyoming and Montana fully considered the storage proposition on the Bighorn in Montana and Wyoming. The Boysen was the conclusion for the State of Wyoming, and the Bighorn at the mouth of the canyon was the idea for Montana.

We have in Montana in the Bighorn mountain area just north of Montana-Wyoming line a 1 million acre runoff, and the only way that that runoff can be saved to the upper area is through the Bighorn project in Montana. If it is not saved there, it goes on down the Missouri to the damage of the people there.

We do want to urge that the door be left open to endeavor to secure a negotiated settlement, if possible, with the Indians. However, I

believe it is the consensus of the opinion of the Montana area that when the Government is in need of a particular piece of property for the benefit and need of its people that the land needed should be taken under proper process, the same with an Indian as with a white.

The Government, I believe, has determined that it is necessary that this land be had. I might say that that storage, that dam site, is no good whatever to the Indians in its present condition. They do not own the water that flows in the Bighorn River. All they own, all they have, is the right that their needs can be supplied from the flow of the stream. So that it is a public interest and that water is public property to a very large degree. So we feel that while negotiations are advisable, the time has come when action must be taken.

In conclusion, we of the Hardin-Billings area are proud to be joined with our Federal Government in the undertaking of transforming the Missouri River and its basin from one of waste and destruction to one of national pride and usefulness. We are well on our way; help us conclude the journey.

Thank you, gentlemen.

Mr. HARRISON. Thank you. Do you have any questions, Mr. Westland?

Mr. WESTLAND. No.

Mr. HARRISON. Mrs. Pfost?

Mrs. PFOST. Yes, Mr. Chairman. I would like to ask Mr. Bunston what type of crops are planned to be grown in this particular area where you hope to put a hundred thousand acres under irrigation.

Mr. BUNSTON. I might state that at the present time this land is principally used for the surplus crop of wheat. When this is irrigated it will be principally a feed ground crop for the livestock industry. That will be brought out by other witnesses. It will reduce the wheat acreage very materially. It will bring in a crop of sugar beets, alfalfa, and feed grains for the feeding of livestock.

Mrs. PFOST. I note that on page 4 of your statement you say that in the 308 Flood Control Report it is stated that 51 percent of the silt entering the Missouri from Yellowstone and its tributaries comes from the Bighorn.

Mr. BUNSTON. Yes.

Mrs. PFOST. Now what is the status of the silt condition then at the Yellowtail Dam?

Mr. BUNSTON. The Boysen Dam is completed. That is in Wyoming up a couple of hundred miles above us on the Bighorn. That has arrested a portion of the silt from the Bighorn River. The rest of the silt in the Bighorn River will be practically fully eliminated by the construction of the lower unit, this Yellowtail project. The two units together, it is estimated, will practically eliminate he silt from the Bighorn River.

Mrs. PFOST. If that is true, then there will be great deposits of silt behind the dams each year. Then over what period of time do you expect the dam to be usable?

Mr. BUNSTON. I might explain that somewhat. The heaviest silt in the Bighorn River comes from Wyoming. The Wyoming project, the Boysen, backs the water up in all of these coulees and forms dunes at entrances to the lake, and the silt does not get a chance to agitate and get out into the stream but is held back up in those upper areas. So the silt that is now being agitated and brought down will not be

coming down, and it will not fill up to the degree that one would naturally expect it would because it will not get a chance to agitate and get in the stream.

Mrs. PFOST. It still would fill these coulees, though?

Mr. BUNSTON. I believe it is estimated that this storage will last over a hundred years without being materially affected.

Mrs. PFOST. It will last over a hundred years?

Mr. BUNSTON. Yes.

Mrs. PFOST. That is all, Mr. Chairman.

Mr. HARRISON. Mr. D'Ewart?

Mr. D'EWART. I have no questions. I might say that Mr. Bunston has made this project a life ambition. If it should come to fruition, nobody would be happier than he.

Mr. HARRISON. Mr. Cool.

STATEMENT OF L. ROY COOL, DISTRICT AGRICULTURIST, HOLLY SUGAR CORP., HARDIN, MONT.

Mr. COOL. Mr. Chairman and members of the committee, my name is L. Roy Cool, district agriculturist of the Holly Sugar Corp., also a rancher, livestock producer and feeder, Hardin, Mont.

In the dividing of the presenting of the feasibility of the Hardin project, and in order that duplication may be avoided as much as possible, it becomes my task to present to you the irrigation benefits which will accrue to our Bighorn County area through full ultimate irrigation of the irrigable acreage and to appraise those benefits as they should apply to the cost of construction of the Hardin project as we see it.

If Congressmen Harrison and D'Ewart comprised the full committee, they would not need any grassrooters from the area. I know their personal experience and actual knowledge of our area conditions would fully qualify them to answer for us. Bighorn County, Mont., is somewhat of a domain—an empire in itself. Its 3,200,000 acres (or 5,000 square miles) make it about the size of Connecticut; it is 2¼ times the size of Delaware. However, our 10,000 people count up to only 2 persons per square mile, while Connecticut's population is 40 persons per square mile and Delaware's population is 146 persons per square mile.

Bighorn County for many years has stood first in the State in livestock population but ninth in crop production. Normally it has a cattle population of about 100,000 and a sheep population of about 50,000 which graze on its 2,900,000 acres of grazing land. This livestock is dependent of the production from our 65,000 acres of irrigated land to provide sufficient feed to carry them over to the next grazing season.

Our 235,000 acres of dry farmland does very little toward this winter feed problem and particularly now, since the combine method is used for harvesting. The result is that we have in our country our principal revenue activity continually in a hazardous and threatened condition.

The 1917–19 period is still vividly remembered by the stockmen of our State and particularly our Bighorn County stockmen. We went into the winter of 1919 with a heavy livestock population, poor range, and a light supply of forage. Hay in the fall brought $30 per ton and

the cattle that survived until spring were eating $60 per ton marsh grass. Three hundred and fifty thousand sheep were killed on the range on account of being unfit for shipment. Nine thousand three hundred and sixty-nine carloads of hay were shipped into our State in comparison with the 7,600 normally.

Another winter remembered by fewer stockmen on account of being longer ago was the one that prompted our Montana stockman, Charles M. Russel, to produce the now famous drawing entitled "Waiting for a Chinook or the Last of 5,000." It is such experiences that happen too often, which have prompted the people of our area to continually urge on every occasion, the development of the Hardin project. Such losses are not wholly local, they directly affect our national economy and welfare.

There is a large acreage of wonderful irrigable bench lands lying on each side of the Big Horn Valley, which has been described to you, and which if brought under irrigation will make possible the converting of this presently hazardous livestock business into one second to none in the West. There is no better sugar beet producing land anywhere in the West than that which lies on the Big Horn benches. Since the construction of the Hardin sugar factory in 1937, the Holly Sugar Corp. has operated at less than half its season capacity. An increase of 150 percent in our production of sugar beets would give us the same percentage of increase in our beet tops, pulp, and molasses, all of which is badly needed to aid in the stabilizing of our livestock industry.

Sugar-beet production does not have price support. It is the one industry from which a substantial portion of the processors tax reverts to the United States Treasury for the support of our Government. In order to increase our sugar production in the United States, all that has to be done is to cut down on our importation of foreign sugar.

It is a soil-building crop and a crop that clears ground of foul and noxious weeds.

These days much thought is being given by Congress and our people to the trouble arising from our overall 5 percent surplus production, over consumption. Much of this was caused by wartime increases of production. After World War I, we had to be content with an agriculture geared to 28 percent over normal. Now we are facing a somewhat similar condition following the Korean struggle. It seems that our present surplus hysteria, however, is more one of fear than actual—how much better it is with war clouds still hovering over us that this country be blessed with a surplus than cursed by a shortage.

Statisticians tell us that during 7 of the past 8 years, the population of the United States has increased at the rate of 2,425,000 persons annually and including the immigrants averaged over 2,500,000 annually. That by 1975, our population will reach 200 million. One extra person for every 4 of today. Our population has increased more during the past 8 years than it did during the 17 years previous to that time, and that during the past 8 years our increase in population has been more, by one-third, than the total population of Canada. We must, therefore, prepare for the fifth dinner plate.

There is another change taking place that may have much to do with our agricultural problem—that is, the decided change taking place in the United States menu. The decreasing importance of

cereal grains in our national diet and the decided increase in our per capita consumption of meats, dairy products, poultry, and eggs. This suggests a substantial needed change from cash grain production to feed and fattening products. This change from wheat to livestock nicks perfectly into our Bighorn livestock problem. It offers relief from our surplus wheat problem.

There is also to be considered the increased population of the west coast area, which is the fastest growing area in the United States.

We have during the past few years in our State witnessed our livestock market move from the east to the west coast area and change from a feeder market to a finished and butcher market.

This likewise changes the plan to the shrewd livestock producer. Today the smart producer of livestock will, if his plan of operation permits, feed out his livestock. If he cannot personally do so, he will prefer to join with some farmer feeder in the area who has the feed. This furnishes more steady work on the farm and leaves the needed fertilizer which feeding produces. E. J. Manyard, an authority on feeding and fattening of livestock, states:

> Sugar beet byproducts along with the grain and alfalfa hay, will produce cheaper beef, mutton, and lamb than any other ration available in the United States not even excepting the grain and alfalfa combinations fed in the Corn Belt.

Gentlemen, I have gone into these conditions facing us in Bighorn County to lay the foundation for the statement I am about to make and that is, "That the owners of the irrigable land lying on either side of the Bighorn Valley can afford to pay and will be glad to pay the reasonable cost of storage of water for irrigation, pay for its diversion, and the cost of putting it on the land. The only conditions being, that the payments be spread over a reasonable term of years and that they may be conditioned on the land's earning capacity, and the cost of operation."

If there should be those too timid to undertake the task, there will be a goodly number of those with the courage to take over and pay off those of little faith. The letters and statements being introduced will clearly prove that.

Gentlemen of the committee, the Bighorn County people need the Hardin project developed. As before stated, the road to construction has been made ready. Public requirements demand its benefits. Unlike most such projects, no one will be hurt and many will be benefited.

Our community has been sending representatives here to urge this development since 1910—we hope its accomplishment will not be long delayed.

I urge that this committe direct the Bureau of Reclamation to take all steps required to obtain right-of-way, complete plans and specifications, and initiate the construction of Yellowtail Dam and Reservoir at the earliest possible date.

I thank you.

Mr. HARRISON. Any questions, Mr. D'Ewart?

Mr. D'EWART. I want to congratulate the witness on this statement which shows very clearly why he urges these increased irrigated lands.

Mr. HARRISON. Mr. Westland?

Mr. WESTLAND. No.

Mr. HARRISON. Mrs. Pfost?

Mrs. PFOST. I would like to ask Mr. Cool, what is the estimated cost per acre on this irrigated land?

Mr. COOL. I could only tell you about what our irrigated land is selling for in the valley that is now under ditch. Good irrigated land is now selling from $150 to $200 an acre.

Mrs. PFOST. I am sorry I did not make my question clear. $150 to $200 is the amount that your irrigated lands are now selling for?

Mr. COOL. Now selling for at present, yes.

Mrs. PFOST. The thing I want to know is what the irrigation water will cost per acre to the consumer. That is, will it be $200, $300, $400 per acre over a period?

Mr. COOL. I think the estimate made by Mr. Clinton was $236, if I remember rightly.

Mr. D'EWART. Mr. Clinton is here. Is that correct, Mr. Clinton?

Mr. CLINTON. $240 for the distribution system.

Mr. D'EWART. Mr. Clinton is the area director, Mrs. Pfost.

Mrs. PFOST. Thank you.

Mr. HARRISON. Any further questions, Mrs. Pfost?

Mrs. PFOST. No, thank you.

Mr. HARRISON. Thank you very much, Mr. Cool.

Mr. Henry Ruegamer.

STATEMENT OF HENRY S. RUEGAMER, PRESIDENT, BIGHORN COUNTY CHAMBER OF COMMERCE, HARDIN, MONT.

Mr. RUEGAMER. Mr. Chairman, Congressman D'Ewart, Senator Murray, members of the committee, the press, all others present:

My name is Henry S. Ruegamer. I am president of the Bighorn County Chamber of Commerce, Hardin, Mont. My statement is brief.

I might say here that our chamber of commerce is quite different than many of those that you find throughout the country because we are composed of businessmen, laborers, farmers, ranchers, and all types of industry in the county.

It is with a great deal of interest and pleasure that we appear here for such a worthy cause as the previously authorized storage of water on the Bighorn River in Montana, which is commonly referred to as the Yellowtail Dam.

I am president of the Bighorn County Chamber of Commerce, and our principal task this year, as in the past, is the building of the Bighorn Dam, because it means so much to the economic development of southeastern Montana as well as its national contribution.

We judge from the evidence, from every authoritative source, that the preservation of water is one of our most needed national assets. Our vast county is very close to 100 miles each way. The construction of this dam could irrigate about 100,000 acres. This would accomodate many families. The richness of our soil, the fine climate, and the assurance of adequate water supply certainly would be an invitation for extensive settlement. We have made much progress but thus far have only touched the surface lightly.

We worked hard and long to secure a sugar factory and our average run during the fall processing season is from 45 to 50 days each year. The Bighorn project would give us much needed irrigation and our sugar processing would tie in ideally through the late fall, winter, and

early spring season. The impact of this payroll on our community would be tremendous. The availability of labor during these seasons is here, both from white people and Crow Indians.

You will either have evidence or have had same which will bring to light many special features in addition to irrigation, such as power, flood control, silt control, and recreational facilities.

We read in newspapers and magazines and hear over the radio that the Government is finding it necessary to decentralize its governmental activities. Industry too is finding the same thing to be true. With plenty of water, plenty of power, and fine transportation facilities, and our wonderful climate, and people who are willing to share its vast open spaces, where better could industry go.

Our neighboring city, Billings, has enjoyed for some time the governmental offices and many new industries. More will come providing our resources are adequately developed.

Five hundred new irrigated ranches in Bighorn County would mean quadrupling our present incoming freight, our business enterprise, and our livestock feeding program. We do not expect to compete citywise with Billings, but with a large agricultural base we can enjoy a normal healthy growth, as well as a balanced and stable economy which is so important in our way of life.

Both of our major political parties have been endeavoring to offer the voters security. The philosophy of Henry Ford should be applied here when he made the statement that with one foot in industry and the other one in the soil our security is realized.

On a radio interview, April 25, 1954, Governor Williams of Michigan stated he was going to encourage the Government to initiate a billion-dollar road program for the purpose of evacuating its people from the large industrial areas should an attack come. We believe that in this atomic age, industry and people should spread out so that the destruction caused by any atomic attack would not endanger our national existence.

Gentlemen, this is important—this is America—let's keep it alive. The Bighorn Dam when completed will do its part in keeping America alive and growing and progressing as it has for almost 3½ centuries.

We urge your favorable consideration with all possible haste an adequate appropriation in the 1955 budget for the purpose of starting the Yellowtail project. There is no place here for greed or selfishness.

In addition to this statement, I have several letters, one of them from the Bighorn County State Bank, and I want to bring out a few points on these letters as I ask to have them placed in the record.

Construction of the Yellowtail Dam would permit farming out of this acreage over 600 productive, substantial units, of 160-acre farms producing a variety of crops every year.

From the Bighorn County Electric Cooperative, Lodge Grass, Mont.:

Whereas, said cooperative deems it necessary to provide, in the immediate future, sufficient electric energy to meet demands of users of electricity in the area of the proposed Yellowtail Dam.

They have gone on record numerous times favoring this project.

The Holly Sugar Corp. Here is something that perhaps will clear up a question that Congresswoman Pfost asked Mr. Cool.

The value of this additional land will increase from approximately $50 to $200 per acre to purchase and from $1 to $4 per acre to lease.

That brings out the valuation of this land with water.

Bighorn County Beet Growers' Association, Inc.

There is a lot of meat in each of these letters but I am just hitting some of the high spots.

The Indians do very little farming themselves, but lease their land to white farmers—good beet land rented on a share-crop basis will net the Indian from $25 to $35 per acre.

The wheatland at the present time is leasing from $2 to $4 an acre. So there is a tremendous increase to the income for the Indian-owned land.

Also a letter from the Bighorn County Livestock Association.

Mr. Cool covered that in his presentation.

The Water Users Association. That is the ditch companies. They are put to considerable expense because of this silt that is drifting down through and filling up their irrigation ditches.

Mr. D'EWART. Is this the irrigation district that would be served?

Mr. RUEGAMER. This is the present one, Congressman D'Ewart.

Then I have one from our extension agent, Mr. Kilpatrick, which is the last letter.

Mr. D'EWART. Without objection, these communications will be made a part of the record.

Mr. RUEGAMER. Thank you, sir.

(The letters referred to follow:)

BIGHORN COUNTY CHAMBER OF COMMERCE,
Hardin, Mont., April 26, 1954.

HON. WILLIAM HENRY HARRISON,
Chairman, Irrigation Reclamation Committee,
Washington, D. C.

SIR: It is with a great deal of interest and pleasure that I appear here for such a worthy cause as the previously authorized storage of water on the Big Horn River in Montana, which is commonly referred to as the Yellowtail Dam site.

I am the president of the Big Horn County Chamber of Commerce, and our principal task this year, as in the past, is the building of the Big Horn Dam, because it means so much to the economic development of southeastern Montana as well as its national contribution.

We judge from the evidence, from every authoritative source, that the preservation of water is one of our most needed national assets. Our vast county is very close to 100 miles each way. The construction of this dam could irrigate about 100,000 acres. This would accommodate many families. The richness of our soil, the fine climate, and the assurance of adequate water supply certainly would be an invitation for extensive settlement. We have made much progress but thus far have only touched the surface lightly.

We worked hard and long to secure a sugar factory and our average run during the fall processing season is from 45 to 50 days each year. The Big Horn project would give us much needed irrigation and our sugar processing would tie in ideally through the late fall, winter, and early spring season. The impact of this payroll on our community would be tremendous. The availability of labor during these seasons is here, both from white people and Crow Indians.

You will either have evidence or have had same which will bring to light many special features in addition to irrigation, such as power, flood control, silt control, and recreational facilities.

We read in newspapers and magazines and hear over the radio that the Government is finding it necessary to decentralize its governmental activities. Industry too is finding the same thing to be true. With plenty of water, plenty of power, and fine transportation facilities, and our wonderful climate, and people who are willing to share its vast open spaces, where better could industry go?

Our neighboring city, Billings, has enjoyed for some time the governmental offices and many new industries. More will come providing our resources are adequately developed.

Five hundred new irrigated ranches in Big Horn County would mean quadrupling our present incoming and outgoing freight, our business enterprise, and our livestock feeding program. We do not expect to compete citywise with Billings, but with a large agricultural base we can enjoy a normal healthy growth, as well as a balanced and stable economy which is so important in our way of life.

Both of our major political parties have been endeavoring to offer the voters security. The philosophy of Henry Ford should be applied here when he made the statement that with one foot in industry and the other one in the soil our security is realized.

On a radio interview, April 25, 1954, Governor Williams of Michigan stated he was going to encourage the Government to initiate a billion dollar road program for the purpose of evacuating its people from the large industrial areas should an attack come. We believe that in this atomic age, industry and people should spread out so that the destruction caused by an atomic attack would not endanger our national existence.

Gentlemen, this is important—this is America—let's keep it alive. The Big Horn Dam when completed will do its part in keeping America alive and growing and progressing as it has for almost 3½ centuries.

We urge your favorable consideration with all possible haste for an adequate appropriation in the 1955 budget for the purpose of starting the Big Horn Dam project. There is no place here for greed or selfishness.

Yours very truly,

BIG HORN COUNTY CHAMBER OF COMMERCE,
HENRY S. RUEGAMER, *President.*

BIG HORN COUNTY STATE BANK,
Hardin, Mont., April 22, 1954.

Mr. WILLIAM HENRY HARRISON,
Chairman, Irrigation Reclamation Committee,
House Office Building, Washington, D. C.

DEAR SIR: It has come to our attention through the press that there is to be a hearing before your committee for the purpose of reexamining the feasibility of constructing the Yellowtail Dam. Also, we understand that three local men will appear before your committee as representatives from this community, namely: Mr. Henry Ruegamer, Mr. L. R. Cool, and Mr. H. W. Bunston. All three of these men are well and favorably known to us and to this community and have long been identified with this most important proposed development.

We doubt if there lies outdoors in the Rocky Mountain area a tract of land so fertile and so ideally adaptable to irrigation as the West Bench, between the Big Horn Mountains and 60 miles to the north, which could be placed under irrigation by the building of the Yellowtail Dam. Conservative surveys fix these lands in excess of 100,000 acres, of which a considerable portion is now producing wheat by the summer fallow method, which gives a possibility of a crop on alternate years. Construction of the Yellowtail Dam would permit earning out of this acreage over 600 productive, substantial units of 160-acre farms producing a variety of crops every year.

We are particularly interested in the irrigation development to be made possible through the construction of Yellowtail Dam. Diversified irrigated farming with the production of sugar beets and beans for cash crops, and hay, grain, and pasture for livestock and livestock feeding, furnish a sound basis for agricultural economy wherever such a program can be instituted.

The electric power feature of this dam is also a major item which should not be overlooked from the earning or income standpoint. The dam site is perfect and the storage is ideal for the production of electric energy which is badly needed in the eastern half of the State.

In addition to the above flood control and desilting would be definite advantages to be gained from this development. There is little wonder that Congress has called Yellowtail Dam the key project of the Yellowstone.

We hope that this project may be dealt with favorably by your committee at this time.

Respectfully yours,

BIG HORN COUNTY STATE BANK,
I. J. PING, *President.*

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BIG HORN COUNTY ELECTRIC, COOPERATIVE, INC.,
Lodge Grass, Mont., April 23, 1954.

Hon. WILLIAM HENRY HARRISON,
Chairman, Irrigation Reclamation Committee,
House Office Building, Washington, D. C.

DEAR SIR: At the last regular meeting of the board of trustees of Big Horn County Electric Cooperative, Inc., the following resolution was unanimously adopted:

RESOLUTION

Whereas Big Horn County Electric Cooperative, Inc., of Lodge Grass, Mont., is now, and has been for 15 years last past, a rural electric cooperative organized under and by virtue of the laws of the State of Montana, and is now, serving 1,279 farmers, ranchers, and urban members with electric energy in Big Horn County, Mont., and Sheridan County, Wyo.

And whereas said cooperative deems it necessary to provide, in the immediate future, sufficient electric energy to meet demands for users of electricity in the area of the proposed Yellowtail Dam; Be it

Resolved, That said cooperative, through its board of trustees, hereby favors and requests the immediate construction of the Yellowtail Dam and powerplant, and request is hereby made to the congressional delegation of Montana to proceed to support all legislation relative to the construction of said project.

This is to advise further that the members of this cooperative have upon numerous occasions made similar resolutions at annual meetings of its members, and associated in statewide meetings showing their interest in the construction of the Yellowtail Dam.

Therefore, it is the desire of said cooperative through its various resolutions, that legislation be promulgated in order that said dam shall be constructed.

Very truly yours,

BIG HORN COUNTY ELECTRIC COOPERATIVE, INC.
CHARLES SWEENEY, *President of the Board of Trustees.*

HOLLY SUGAR CORP.,
Hardin, Mont., April 20, 1954.

WILLIAM HENRY HARRISON,
Chairman Irrigation Reclamation Committee,
House Office Building,
Washington D. C.

DEAR CONGRESSMAN: Our attention has been centered on the recent activity and forthcoming hearings to be held in connection with the proposed Yellowtail Dam and we would like to present herewith a few pertinent facts relative to the economic value to the county and State if we were able to process a maximum acreage of beets in the Hardin plant.

As the matter now stands, we have approximately 70,000 acres of irrigable ground from which we contract some 10,000 acres of beets. Should Yellowtail be constructed and the lands under the dam be brought under irrigation, we would then have approximately 120,000 acres of irrigable land from which we could expect upward of 20,000 acres of beets, which would be nearing the amount of beets necessary for a maximum run of the factory.

It is needless to recite to to you what benefits are derived from including sugar beets in a crop program whereby the soil and fertility are conserved by proper rotations and utilization of the beet byproducts for fattening livestock, as you are well aware of such benefits as have accrued in the beet raising areas of your State. Imagine then what doubling the beet acreage would do for the south-central area of Montana. But aside from those benefits just mentioned, the value of this additional land will increase from approximately $50 to $200 per acre to purchase and from $1 to $4 per acre to lease. This amounts to a great increase in revenue to the Indians owning such land.

Finally, should enough additional acres be brought under irrigation to double the present sugar beet acreage, this would mean that instead of a 50-day campaign, the Hardin plant would operate in excess of 100 days. Our present payroll amounts to approximately $3,500 per day, therefore another 50 days would yield an additional $175,000 revenue to the area. In addition an increase in acreage would cause the installation of more receiving stations which would

offer more employment in the fall, and incidentally considerable number of Indians are employed in the factory and throughout the area on receiving stations.

The increase in number of days of operation of the plant would also reduce the idle period by 2 months and these 2 months are at a time when other employment opportunities are at an ebb and many workers are drawing compensation.

Respectfully submitted.

HOLLY SUGAR CORP.
P. M. ROSENOW,
Chief Agriculturist.

BIG HORN COUNTY BEET GROWERS' ASSOCIATION, INC.,
Hardin, Mont., April 20, 1954.

WILLIAM HENRY HARRISON,
Chairman, Irrigation and Reclamation Committee,
House Office Building,
Washington, D. C.

GENTLEMEN: Our attention has been called to a hearing to be held the last of this month concerning the Yellowtail Dam. Our organization has continuously since the building of the sugar factory at Hardin in 1937, worked for more land to be brought under irrigation. The only way this can be done is through the building of the Yellowtail Dam.

The Indians do very little farming themselves but lease their land to white farmers—good beet land rented on a share-crop basis will net the Indian from $25 to $35 per acre.

The beet acreage in the Hardin district should be doubled at least to permit an economic factory run and to produce more nearly byproducts requirement of pulp and molasses.

There is 100,000 acres of excellent irrigable land on the benches of the east and west sides of the Big Horn River Valley. In order to water these lands by gravity flow it is necessary that storage be provided in the canyon and water diverted at a height from the dam which permits the delivery of the water by gravity flow. About 5 years ago less than 40 percent of this land was white owned, the balance Indian owned. But now over 60 percent is white owned, and at the present rate of sales will be largely white owned in a comparatively short time.

This change in ownership will be helpful in the development of those areas into farm-size units and encourage the practice of diversified farming. This change of ownership should be largely completed before the dam could be built if started now. Five hundred farms of 200-acre tracts, if so developed would give the county a balanced farm and livestock operation that would be economically sound. These additional farm units will be helpful in locating new producers looking for new locations.

We do not pretend to be authorities on power earnings, but we feel that the rated 200,000 kilowatts of power that would be developed from this project would be important from a revenue standpoint and that with the irrigation earnings together with the large silt and flood-control features which are national in scope, and benefits plus the wildlife and recreation benefits should make the Hardin project one that would be difficult to surpass.

The storage basin is made to order, and just by closing off the lower end of the canyon we would have all the mentioned multiuses—which would result from it.

Respectfully presented.

JOHN BESEL,
Pres., Big Horn County Beet Growers' Association.

Attest:

W. A. RADER, *Secretary.*

BIG HORN COUNTY LIVESTOCK ASSOCIATION,
Hardin, Mont., April 16, 1954.

WILLIAM HENRY HARRISON,
Chairman, Irrigation Reclamation Committee,
House Office Building, Washington, D. C.

GENTLEMEN OF THE COMMITTEE: Big Horn County comprises 3,200,000 acres, of which about 2,900,000 is grazing. Only about 2 percent of this land is irrigated and this 2 percent has to produce enough sugar beets for a limited factory run,

a sizeable acreage of beans, some wheat, and endeavor to produce enough winter feed for livestock feeding and fattening.

Consequently, large quantities of feeds and concentrates have to be shipped in.

What Big Horn County needs is two or three times its present irrigated acreage—then we could be an independent self-supporting unit, which we are not at present.

The sugar factory should get two to three times its present production to make an economical run. We need the extra pulp and molasses for livestock. Our people would prefer to support home production rather than foreign.

The Big Horn Dam is our solution. It will permit development of 2 or 3 times our present irrigated acreage. It will develop power which will go far toward paying for the cost. It will arrest the silt in, and control the flow of the river and bring aid to lower Missouri areas from floods and sandbars. We want it, we need it, we will appreciate it.

ARCHIE D. WILSON, *President.*

TWO LEGGINS WATER USERS ASSOCIATION,
Hardin, Mont., April 20, 1945.

To Whom It May Concern:

On behalf of the board of directors of the Two Leggins Water Users Association, a corporation, organized and existing under and by virtue of the laws of the State of Montana, I wish to advise the committees of Congress and the Congress of the United States that the Two Leggins Water Users Association is a corporation consisting of stockholders of some 250 farmers residing in the Big Horn River Valley, and the corporation operates an irrigation system which diverts water from the Big Horn River within the boundaries of the Crow Indian Reservation and carries the water along the west slope of the Big Horn River Valley to approximately 9,000 acres of land which are irrigated from the canal of the corporation.

During the past several years the Two Leggins Water Users Association has been caused to expend large sums of money because of the silt and sediment carried in the Big Horn River, which is deposited in the main canal system of the Two Leggins Water Users Association.

Also, the board of directors desires to call attention to the fact that because of floodwaters, upon numerous occasions the dam located across the Big Horn River has been injured and partially destroyed. It is necessary that the floods of the Big Horn River be controlled and the silt condition remedied in order to prevent excessive expense to the farmers of irrigated lands under the irrigation system of the corporation. We believe that the construction of the Yellowtail Dam will solve these various problems, and that it is necessary that such dam be constructed.

Very truly yours,

C. C. BOUNOUS, *President.*

COOPERATIVE EXTENSION WORK IN
AGRICULTURE & HOME ECONOMICS, STATE OF MONTANA,
Hardin, Mont., April 26, 1954.

The Honorable WM. H. HARRISON,
Chairman, Irrigation and Reclamation Committee,
House Office Building,
Washington, D. C.

DEAR SIR: People with whom I work have asked me to express certain reasons why additional storage of water in the Big Horn Canyon would be agriculturally important to them.

By serving the people in Big Horn County, as their county agent, I have developed a policy which I would like to state. My two objectives, as a county agent, are: (1) To assist in developing people who will be objective in their thinking, who base their decisions on facts, and take the responsibility for bettering themselves and their communities; and (2) to bring them the latest, most economical scientific information which will promote economic and personal stability.

When the people, with whom I work, considered the proposed project whereby dry land would be developed into irrigable land, they committed themselves

to work on the problems which will arise when the reclamation project is approved because they want to be included in improving the agriculture in Big Horn County.

The following factors are presented to your committee to assist you in your deliberation as to the feasibility of the project. The area designated by the Bureau of Reclamation for improving lies west of the Big Horn River on land that has been reported by them as being suitable for irrigation. The soils in this area do have some spots that are difficult to manage under dry land conditions. The erosion that we do have, during the winter months, occurs on these lands. Proper rotation of irrigated crops would reduce or eliminate this factor.

The growing conditions is this part of the county are ideal for wheat, barley, alfalfa, sugar beets, corn, flax, and tame grasses. Stated in another way, this area is suitable for the production of 6 of the 9 most important crops grown in Montana. The average length of frost-free period is 134 days. This average is based on data covering a 51-year period. The average date of the last killing frost in the spring is May 14, and the average date of the first killing frost in the fall is on September 25.

In Montana, crop production and elevation are closely related. Over 47 percent of all harvested crops in Montana are produced between the 2,501 and the 3,500 feet elevation range. All harvested crops in Big Horn County are grown within this zone. The land included in the reclamation project is therefore most ideally located, when you consider elevation and length of growing season.

The average annual rainfall in Big Horn County varies from under 13 inches to 15 inches. Approximately 67 percent of this precipitation falls during the 5-month growing season. Not all of the precipitation that falls during the growing season is utilized by the plants. Even though some of the rains can be measured at the weather stations, they are of little value to the crops because of the high rate of evaporation. We have learned that dry land wheat cannot be grown successfully year after year on the same piece of land. In order to secure more stability, farmers in this section have to rely upon summer fallowing their land to grow a crop every other year or else install irrigation systems. The rainfall in this section of Montana can be described as erratic.

All of the water that is now used in the Big Horn Valley for irrigation is supplied from melting snows and mountain springs. During the early spring, when irrigation water is not needed, a large percent of the water is lost because of inadequate storage facilities.

I am positive that the people of Montana have sufficient technological information to develop the proposed irrigation project; and I am confident that the people of Big Horn County will be able to take the responsibility for planning, developing and improving the land if irrigation water is supplied.

At the present time, over 28 percent of the farms in Big Horn County are operated by tenants. If new irrigated land were available, which could be purchased, it seems only logical that tenancy would be reduced. Reducing tenancy by ownership, will increase farm stability and insure continuance of the family-sized farm.

Sincerely yours,

H. M. KILPATRICK,
County Extension Agent.

Mr. D'EWART. Mrs. Pfost, do you have any questions?

Mrs. PFOST. No.

Mr. D'EWART. Thank you very much for being present and contributing your statement.

Mr. RUEGAMER. Thank you, sir.

Mr. D'EWART. Mr. George Hogan, Junior.

STATEMENT OF GEORGE HOGAN, JR., MEMBER OF THE CROW TRIBE OF INDIANS, STATE OF MONTANA

Mr. HOGAN. Mr. Chairman and members of the committee, I am going to read my statement here before you to show you the actual things that have been taking place in the Crow Tribe of Indians as far as I can observe.

Mr. D'EWART. Did you give your address for the record?

Mr. HOGAN. Lodge Grass, Mont.

Mr. D'EWART. Thank you.

Mr. HOGAN. My name is George Hogan, Jr., a member of the Crow Tribe of Indians in the State of Montana. I am going to repeat what I have said in a Crow Tribal Council with a quorum of 123. It reads as follows:

I, George Hogan, Jr., a member of the Crow Tribe of Indians in a duly called council meeting, am talking to you as one of the tribal leaders to express my personal aims and wishes. My fellow-tribesmen, my effort is always for the best interest of my people, the Crow Tribe of Indians. In my past experience, the Crow Tribe is in very much need of good leadership. We have all suffered in many ways in the last few years, some more and some less. I want to make my stand very clear on this Yellowtail Dam. As you all know, I am always for this good development, and I make no bones about it. I feel that way because the building of the dam would benefit my people as well as other people around about us, and at the same time, it would make our Nation stronger against possible agression by our enemies. Of course, we, Crow Indians, want just and fair play. We ought to cooperate with our Nation's leaders in every way so that we, as a Nation, may remain strong which is bad news to our enemies. Many of you have asked me and also the chairman has asked me in the past councils to express my stand, so I present this statement as a matter of record at this time and I want to say; I beg of you my people and the good Congressmen of our National Capital and also to the President of the United States, to please understand us, the Crow Indians. We only want justice and fair play.

I have been elected a delegate twice, and it seems to me like that each time I have been barred. The reasons are that I have been always for the Yellowtail Dam. I now represent the minority of the Crow Tribal Council. I believe, however, that I can truthfully say that I represent the majority wishes of the Crow Tribe. The names to a petition will prove that fact.

I am going to quote a phrase in a letter from President Dwight D. Eisenhower to the newly appointed Indian Commissioner Emmons, dated September 2, 1953, from Denver, Colo., as follows:

This administration, as you know, has pledged itself to consult with the Indian people of this country and to give them every opportunity for a full expression of their desires, suggestions, hopes, and aspirations.

We believe in our President as sincere in what he said, so in regard to this Yellowtail Dam, I will quote at this time for the Crow Tribe of Indians the 10th section of the act of June 4, 1920 (41 Stat. 751) which provides:

That any unallotted land on the Crow Reservation chiefly valuable for the development of water power shall be reserved from allotment or other disposition hereunder, for the benefit of the Crow Tribe of Indians.

In the considerations of the various offers made by the Bureau of Reclamation, the Crows never know of the contents of our expert advisor's report, Barry Dibble. I understand that this report is in the hands of Robert Yellowtail, the present chairman of the Crow Tribal Council. I believe that the correct sentiment of the Crow Tribe is not truthfully represented by the present Crow Tribal Council. I agree with the area director, Paul L. Fickinger of Billings, Mont., that a referendum vote should be used so that all may have a chance to have their say. There are about 1,200 adult members of the Crow Tribal Council. With these few facts before you, I believe that if an unbiased referendum vote is taken by all of the adult members of the Crow Tribal

Council the true picture will be that the majority of the Crow Tribe will be for the construction of the proposed Yellowtail Dam.

Mr. D'EWART. Mrs. Pfost, any questions?

Mrs. PFOST. No.

Mr. D'EWART. We want to thank you, Mr. Hogan, very much for that very fine statement. I gather it is your view that if a referendum was held the majority of the Crow Tribe would be for the Yellowtail Dam and Hardin unit?

Mr. HOGAN. I believe so.

Mr. D'EWART. Thank you very much.

Mr. J. Carter Johnson.

STATEMENT OF J. CARTER JOHNSON, CHAIRMAN OF THE WATER RESOURCES AND YELLOWTAIL DAM COMMITTEE OF THE BILLINGS CHAMBER OF COMMERCE

Mr. JOHNSON. My name is J. Carter Johnson. I am vice president of KOOK radio and television of Billings, Mont. I am appearing before the committee in my capacity as chairman of the Water Resources and Yellowtail Dam Committee of the Billings Chamber of Commerce. I have had over 25 years experience in agriculture and irrigation, as well as engineering training, so I do not appear before your committee without first-hand knowledge of the subject on which I speak.

I am appearing before your committee to urge the advisability of an appropriation for the purpose of enabling the Bureau of Reclamation to secure the reservoir area and right-of-way necessary to resume the construction of the Yellowtail-Hardin unit of the Missouri Basin development.

The Yellowtail unit is a part of the Missouri River Basin project as authorized by section 9 of the act of Congress approved December 22, 1944 (58 Stat. 887) referred to as the Flood Control Act of 1944.

The Yellowtail Dam site is located some 43 miles south and west of Hardin, Mont. It is easily accessible by a fairly good water-grade highway, much of which is oil surfaced. There are no roads, railroad beds, cities or tillable lands that will be submerged or require transplanting. The natural topography is ideal and nowhere has God provided man with a better—more ideal place on which to build such a structure as every dollar expended can be used to further the dam construction, and no land of tillable value will be lost—to be replaced by other lands made irrigable by the dam's waters.

The Yellowtail unit is the largest and a very desirable portion of the Missouri Basin project. The effort and expenditure of some $2 million already put forth in mapping, testing, and general preparation for construction is a visual and actual proof that the Bureau and its engineers have in the past and do now, consider the Yellowtail project a feasible, sensible undertaking, and that it is basically sound from the standpoint of economics. Included among the direct benefits are numbered virtually all types that are possible from water resources development—irrigation, power, flood control, sediment control, river regulation, fish and wildlife, and recreation. Development of thousands of acres of productive land in the Bighorn, Yellowstone, Little Bighorn, Tongue, and Powder River areas are awaiting and dependent on the Yellowtail development.

There are vast acreages, some of which are now producing only wheat, which with the advent of irrigation, could be put to the production of sugar beets, cereal grains, feeds for livestock, beans, vegetables of all kinds, etc. This would help relieve the wheat surplus that is accumulating due to the fact that extensive wheat production is the most satisfactory crop to produce under dry or semiarid conditions as they now exist. At this point when mention is made of surplus in wheat or other farm commodities, it is important to remind your committee that no part of this agricultural development could be available for from 8 to 10 years. Today what is in surplus could be a famine condition in 1960 or 1970. A shortsighted policy has been costly in both domestic and national affairs. The lack of diversification of crops is not a sound agricultural policy—either from the standpoint of the farm itself or national economy.

I should like also to impress upon your committee that livestock is an important factor in the economy of Bighorn, Yellowstone, and adjacent counties, and that in most instances the production of livestock is limited to the ability of the irrigated acres to produce hay and concentrates in sufficient quantities for winter feeding. I also wish to point out that the field of livestock expansion in other than cattle and sheep will also be made possible with irrigation. The processing of vegetables, meats, and other agricultural products could be accomplished by the advent of sufficient power and water to process them for national or even international distribution.

It is not my purpose to reiterate to you any of the technical aspects of this project as the Bureau of Reclamation has covered this field. Suffice it is to say that the Bureau will no doubt confine its report to the Yellowtail area only in its report as the irrigation developments that will result from the power produced will be treated by that department only as they come up for individual attention. The area thus affected is far in excess of the acreage in the immediate area of the dam. The lower Yellowstone, the Tongue, and Powder River valleys as well as some in northern Wyoming and bench land in the immediate vicinity of these rivers will constitute an acreage in excess of 180,000 acres. The main factor for this irrigation development is power for the pumping of water.

The State Water Board of Montana is the only State water board that has proceeded on its own initiative to bring as many acres under irrigation by gravity as it possibly could with its limited financial resources without the subsidy of Federal aid. This we submit as evidence that the citizens of this great State feel the pressing need of such development as it is only from such projects and works that progress can be instituted. In asking for the development of the Yellowtail project your help is necessary as its magnitude and its interstate ramifications make it a Federal project, and it is with this in view that we feel we are justified, without apologies, in coming before your committee.

During World War I the price of wheat and a few good years of moisture brought an influx of settlers to Montana, Wyoming, and North Dakota. These people built homes, schools, and churches, but between 1920 and 1932 a series of dry years and deflated prices left these settlers destitute and their farms were abandoned. Why? Moisture was the answer to all of their trials. Anywhere where small irrigated plots were cultivated and wells or dams provided needed

moisture these people remained. It is evident therefore that irrigation is necessary for a continued stable economy for the State of Montana.

The Yellowtail powerplant will be capable of producing 200,000 kilowatts or 750 million kilowatt-hours of electric energy. Some of this power is needed at present but will be urgently needed by the time the dam can be completed. Again I wish to bring to your attention that what we are talking about today cannot be realized, even with immediate action, for a period of from 6 to 10 years. Electric energy has many and varied uses in this area. We must have energy for our farm needs, the REA and irrigation—for urban and municipal needs, for manufacturing and industrial development. For a State such as ours where development is still in the future, electrical energy is a must. Montana has vast natural resources of timber, minerals such as coal, chrome, sulfur, and numerous metals where electrolytic process of reduction is of primary importance. All of these are within a radius of 100 miles of the Yellowtail Dam site.

The Montana Power Co. stands ready and willing to cooperate in this development. They will install a transmission line from Billings to supply the necessary energy for the construction of the dam. They are also willing and able to take over the generation of the power and its transmission on the same basis as proposed for the Canyon Ferry Dam, or buy the surplus energy on the same basis and terms as now exist at the Fort Peck project. They will complete a transmission line from Anaconda to Billings by early fall. The occasion for this line is the lack of power in the southeastern part of Montana—even though the power company has recently completed a 60,000-kilowatt steam-generating plant in Billings, the power shortage is acute at the present time. The newly developing Williston Basin oilfield will be an additional powerload, as will the chrome mines when production gets well underway. This line will traverse a very fertile area of Montana and could be the distributing line from Yellowtail Dam westward if ample power is available.

The flood disasters of 1953 in northern Montana, and the 1952 floods of the Missouri and Mississippi should stand out as grim reminders that we should not lose sight of the need for the retention and subjugation of excess water from the spring runoff. The damage from these floods and the money spent in rehabilitation and relief would go a long way toward payment of construction of the dam.

I would be remiss in my presentation if I failed to mention that there is opposition to this project. But may I ask you what advancement to civilization and economic progress has not had opposition? As in all past progress the opposition is often motivated by selfish interest or has a background of misunderstanding or superstition, and this project is no exception. Any opposition to it should be studied until the true facts are brought to light. Those close to a project often view it with malice or prejudice and fail to grasp the significance of the allover picture. History has proven that social and economic improvement in a country or community usually stems from an outside source.

There has been a fairly complete study and investigation made as to whether the Yellowtail project is desirable at this time. No opposition has been encountered among the businessmen, farmers, and laboring people who might be affected either directly or indirectly from its construction. These people live within a radius of 150 miles

of the dam site. The only opposition has been from a minority faction of the Crow Tribe. One Indian reported to me that the main reason that the Indians are still wards of the Government is due to the fact that they are reluctant to accept progressive ideas and they have failed to appreciate that a venture of this nature is in cooperation with them, and to their advantage as well as the country as a whole. He stated that the younger generation of Indians through participation in sports, and so forth, realize that the world has and will go forward. The Yellowtail Dam is one of those advancements and that he and a good majority of the tribe are for it.

The businessmen and farmers along the Bighorn, Yellowstone, Tongue, and Powder Rivers are for the dam almost to a man. Also, a number of the cities in the surrounding areas have expressed a desire that the work go forward.

Of course, the immediate area is vitally interested but a structure of this nature has far-reaching significance in the Nation's economy as a whole. Machinery, steel, cement, lumber, and labor are required—these come from all parts of the country; they create labor and they all return a national tax income. If we were to follow through on the tax return for the completed project we would find that the increased business with its resulting taxes of every nature in connection thereto, would enable the Government of the United States to have returned to it more than 60 percent of the capital they put into the project by the time it is completed. Further, it is an investment with a self-liquidating return from the sale of power generated and irrigation assessments. I will not go into these figures as the Bureau of Reclamation covered this field.

I, therefore, feel that the Congress of these United States should in the interest of increasing the economy of the Nation, aiding its social status, and promoting general prosperity should make the necessary appropriation for this project.

Then I wish to add further—the thinking of the Nation as a whole today is manifested by the recent chamber of commerce convention held in Washington which has asked for further development of irrigation. The new film It is Everybody's Business by the Du Pont Corp. highlighted irrigation. The vice president in his address to the group presented it.

The national mind today is wondering about the solution of our ever-increasing population. We must feed these people, as well as try to maintain a happy controlled relation abroad, and reduce hunger insofar as it is advisable to do so.

Therefore, it appears that if the challenge is to be made we must act, not later but now, as it may be later than we think.

Thank you.

Mr. D'EWART. Mrs. Pfost, do you have any questions?

Mrs. PFOST. No, thank you.

Mr. D'EWART. Mr. Dawson?

Mr. DAWSON. I have just one comment. I heartily agree with your statement that the State water board of Montana is the only State water board that has proceeded on its own initiative to bring water under irrigation by gravity.

Mr. JOHNSON. The only one I know of.

Mr. DAWSON. Our Utah State Water and Power Board does have a revolving fund set up by the legislature to help on projects of this

kind, and they have a good many projects being carried on by the State alone, not any Federal assistance.

Mr. JOHNSON. That is what we mean here, and I did not know any other State had done anything along that line. I know they have a State water board. Have they put in any projects?

Mr. DAWSON. They have a State water and power board, and they have a revolving fund. They put money out in small districts to develop their projects in the form of loans to them, and then as the money is paid back, the projects pay out, it goes back into the fund and is used again to help other projects.

Mr. JOHNSON. These of necessity have to be very small projects.

Mr. DAWSON. That is right. It is the same in our State.

Mr. JOHNSON. I did not know Utah had done anything like that.

Mr. D'EWART. Thank you very much, Mr. Johnson, for your fine statement indicating the desire for this project by businessmen in that area.

I think we can have one more witness before lunch. He is Mr. Herbert L. Buck. For the information of the members of the committee, Mr. Buck is treasurer of the National Reclamation Association and has appeared before this committee on a number of occasions in connection with that organization.

STATEMENT OF HERBERT L. BUCK, SECRETARY-MANAGER, BILLINGS CHAMBER OF COMMERCE, AND TREASURER, NATIONAL RECLAMATION ASSOCIATION

Mr. BUCK. Thank you, Mr. Chairman.

I was interested in the Congressman's comment and question about State association. It occurred to me while down here we might do a little advertising and I will distribute this little booklet.

Mr. D'EWART. We do not charge any extra for that.

Mr. BUCK. I have found that to be true, and I have brought some of the reports for 1952 of the State water board, which is published biannually by the Montana Reclamation Association, which indicates in our thinking two things.

First, Montana is better off economically because of the activity; and, secondly, as was said about Utah, we in Montana are trying to help ourselves within what we think the limits of our resources are in the development of these water and land resources projects.

Mr. DAWSON. Might I comment on that point? I think that is one of the most commendable things that any of the States have done in setting up their own State water and power boards and moving in on some of these smaller projects the State could handle for themselves if they made an effort.

Mr. BUCK. Yes, sir.

Mr. DAWSON. I have studied your report before, and I know something of your activities. I really think it is a pattern that could well be followed in all of the other States. There is too much of a tendency to come to the Federal Government on some of these small projects that could be handled well within the State, and then at the same time we complain about the unbalanced budget and Uncle Sam taking the money away from the people in the State and bringing it back here

and syphoning off 50 percent of it, and then letting the trickle come back.

You have really got the answer on some of these things that you can handle yourself.

Mr. BUCK. I suspect as time goes on more of the States will give attention to this form that Montana and Utah are developing for the small projects, without a doubt.

Mr. D'EWART. I might add, that according to testimony presented to this committee a few days ago, Montana has spent approximately $11 million of its own money on irrigating land within the State.

Mr. DAWSON. I will say that you are ahead of the State of Utah. Our water and power board has only been in existence, I think, for about 5 or 6 years, and we have some difficulty in getting appropriations from the legislature, but we are making a start. We do need more money.

Mr. BUCK. I talked with your Mr. Harris about it, who is on the national board. Texas was asking us for some of this material at the last national convention at Reno. They must be thinking along the same lines, trying to get a picture so that they may develop a local plan where it is feasible.

Mr. Chairman, I have no prepared statement but have a number of statements from various agencies and groups and organizations in the general eastern area designed to give the committee some idea as to the interest and desire for this project in eastern Montana.

The one statement I have is from the Yellowstone River Compact Commission and the Montana member of that commission, in which it is pointed out that Montana never will have a sufficient amount of water from the Bighorn River and feeding on down from the confluence with the Yellowstone River until the Yellowtail Dam is built, because the compact, when it was planned, took into account that the Yellowtail Dam Storage was in the Missouri Basin program and, therefore, in due course of time would provide storage water that would help Montana. This statement is signed by Mr. Fred Buck.

Then I have a statement from the chairman of that committee, Mr. Frank Stermitz, in which he bears out the importance of the storage when the flow in the Bighorn is low. Conditions could be quite acute for established irrigation projects without the storage.

A statement addressed to Mr. E. W. Rising, a representative of the State water conservation board, in which they indicate their interest. I shall not read these unless it is your desire, Mr. Chairman.

I have a statement from the Buffalo Rapids project, which extends a series of high bench developments between Terry and Glendive, pumping projects entirely, in which they not only indicate their interest for the desilting and the regulation of the flow of the river, but they say, "We wish to have it borne in mind, however, in planning for construction of dams that we will have additional land to be irrigated in this area and that the allocation of water for irrigation of these additional lands should be provided for at the time of planning for construction and operation of this dam or any future waterworks affecting the number of cubic-feet-per-second flow of water in the Yellowstone River at this point."

The Hysham Water Users Association have a statement. Their problem is power, and they are almost a brownout at times during the

summer now, which they go into for the information of the committee, pointing out until additional power is provided through such a source as the Yellowtail Dam they are going to suffer loss and failure to produce the full production of their project.

Then from the president of the Tongue River Water Users Association, a statement pointing out again, as that Tongue River is developed from the dam which has already been built and storage there now, that there is some 20,000 acres of land under irrigation, but that is only a small acreage compared to what could be irrigated; and since most of it is on the higher benches, it too will depend on power from Yellowtail Dam for the development, or some other source if not there.

A letter from the Glendive Chamber of Commerce showing an interest.

A letter from the board of control of the lower Yellowstone project, Sidney, Mont., indicating interest.

One from the Montana-North Dakota Beet Growers Association, and one from the Sidney Chamber of Commerce.

The Sheridan Chamber of Commerce indicated an interest in a letter from their president.

The Laurel Commercial Club.

Then, Mr. Chairman, this statement of John Haw. I believe you have the original of that: do you not?

Mr. D'EWART. Yes. I made it a part of the record earlier in the day.

Mr. BUCK. It has been cared for?

Mr. D'EWART. It has already been made a part of the record.

Mr. BUCK. Now then, most of these people furnishing statements are water users and more interested in water, but I have here a statement by George Lackmann, president of the Montana State Rural Electric Cooperative Association, Inc., in which he has indicated for his association the need and the desire for power through the development of the Yellowtail Dam.

Then I have individual statements from the Wyrulec Co. REA at Lingle, Wyo., from the Sheridan-Johnson Rural Electrification Association, Tri-County Electric Association, Inc., at Sundance, Wyo., the Niobrara Electric Association, Inc., at Lusk, Wyo.; the Mid-Yellowstone Electric Cooperative, Hysham, Mont. These are all cooperatives, the REA Park Electric Cooperative at Livingston, Mont.; the Fergus Electric Cooperative at Lewistown, Mont., and the Yellowstone Valley Electric Cooperative at Huntley, Mont. All of these letters testify to the growth and development. I am sure the committee is familiar with this detail, but they point out that in the course of another 10 years, or much less than that, I believe, beginning in 1960, along in there, there is going to be considerable shortage of power as they see the situation now.

These cooperatives have been striving frantically for a number of years to develop the situation that would assure them of power, and they believe that the Yellowtail Dam would do that.

Mr. D'EWART. Without objection, the statements will be made a part of the record at this point.

(The statements referred to follow:)

YELLOWSTONE RIVER COMPACT COMMISSION,
Helena, Mont., April 17, 1954.

Mr. HERBERT L. BUCK,
Secretary-Manager, Billings Commercial Club, Billings, Mont.

DEAR MR. BUCK: This is in reply to your verbal request for information on operations of the Yellowstone River compact as it pertains to the Big Horn River Basin.

Among other things, the compact provides in article V the following:

A. "Appropriative rights to the beneficial uses of the water of the Yellowstone River system existing in each signatory State as of January 1, 1950, shall continue to be enjoyed in accordance with the laws governing the acquisition and use of water under the doctrine of appropriation."

It is clear that the natural flow of the river shall be used to satisfy the prior water rights. The flow, over and above this requirement, shall be divided 80 percent to Wyoming and 20 percent to Montana. The point of measurement being the last diversion from the Big Horn River above its junction with the Yellowstone Rixer excluding the inflow of the Little Big Horn.

During the irrigating months when the natural flow of the river is just sufficient to supply the existing rights in both States the only water that is subject to division by the compact between the two States is water that would come from storage.

Before the Boysen Reservoir was built there were several years when the flow of the river was not sufficient to take care of all the old rights in Montana. On at least one occasion the irrigators in Montana received storage water from the Shoshone Reservoir which was turned out to them through the generosity of the Bureau of Reclamation. This act on the part of the Bureau was done gratuitously to save the crops in Montana and in no way gave the Montana irrigators any rights to water use from the reservoir during succeeding years.

There are large blocks of potentially irrigable land in the Big Horn Basin, both in Montana and Wyoming, but this land cannot be placed under irrigation until additional storage reservoirs are provided. The major key to the whole situation is the construction of the Yellowtail Dam in Big Horn Canyon. This would provide the storage needed to irrigate all the potential area in Montana and allow Wyoming to use the normal flow of the river to develop the potential irrigable lands within its borders.

The Yellowstone River compact was designed to provide for the distribution of storage water between two States and the records of stream flow show that when the Yellowtail Reservoir is built we will have no shortage of water supply for all of the potential land in Montana. But without this reservoir there will undoubtedly be years of low flow when there will be insufficient water crossing the Montana-Wyoming border to satisfy the old water rights in Montana existing prior to January 1, 1950.

Trusting the above gives you the desired information, I am,

Very truly yours,

FRED E. BUCK, *State Engineer.*

YELLOWSTONE RIVER COMPACT COMMISSION,
Helena, Mont., April 19, 1954.

Mr. HERBERT L. BUCK,
Secretary-Manager, Chamber of Commerce, Billings, Mont.

DEAR MR. BUCK: In confirmation of our conversation of April 15, 1954, the Yellowstone River Compact Commission anticipates difficulty in administration on some streams until adequate storage facilities are available near the Montana-Wyoming boundary line. Storage and regulation at such points would minimize the problems of division which could be very acute in years of low flow. This is particularly true in the Bighorn River Basin with its extensive present and potential irrigation use.

Very truly yours,

FRANK STERMITZ, *Chairman.*

STATE OF MONTANA,
STATE WATER CONSERVATION BOARD,
Helena, Mont., April 16, 1954.

Mr. E. W. RISING,
Washington Representative,
State Water Conservation Board,
Washington, D. C.

DEAR MR. RISING: The State Water Conservation Board is very desirous that the Yellowtail project in Big Horn County, Mont. be constructed at as early a date as possible. On July 6, 1953, the board wrote you requesting that you urge upon the Bureau of Reclamation and the Congress the necessity for an early start on construction of this project as the board believes it to be very essential to the development of that area.

We understand now that hearings relative to this project are to be held this month by congressional committees. This board requests that you give on its behalf full support to this project at these hearings.

The board feels that this project is a key development in southeastern Montana and that its construction is needed to bring prosperity to that area through furnishing a water supply for irrigating lands, as well as through the needed electric energy which will be created by it. The board already has a distressing problem in the vicinity of this project. It has constructed the Hysham pumping project, which is an irrigation development serving 7,600 acres of land in Treasure County. Present pumping installation requires 1,300 kilowatts while we are now limited to a power supply of 900 kilowatts. Thus further development on this pumping project has been halted awaiting the availability of an additional power supply. This is just one of the many problems that construction of the Yellowtail project would solve.

Very truly yours,

STATE WATER CONSERVATION BOARD,
R. J. KELLY, *Assistant Secretary.*

BUFFALO RAPIDS PROJECT,
Terry, Mont., April 21, 1954.

Mr. A. L. MILLER,
Chairman, Committee on Interior and Insular Affairs,
House of Representatives,
Washington, D. C.

DEAR SIR: This is in regard to scheduled hearings regarding desirability and economic feasibility of construction of the Yellowtail Dam.

We, as water users on the Buffalo Rapids irrigation project—which consists of approximately 25,000 acres of irrigable land located from 20 miles east of Miles City to 1 mile west of Glendive, Mont., and served by five pumping stations—are vitally interested in having Yellowtail Dam constructed for these reasons:

First, silt in the Yellowstone River has been quite a problem for our project, causing excessive wear on our pumps and additional costs for cleaning of intake channels, canals and laterals and if this dam, along with Moorhead Dam, would serve as an aid in silt control, it definitely would be very beneficial to us.

Second, the regulating of water through this dam would allow keeping the river at a higher level at the latter part of the irrigation season and thereby increase the efficiency of our pumping stations. This can readily be understood when it is realized that at low water mark during the fall the river elevation has been only 1.7 feet above the top of our pump intake tubes, while high water elevation is 14 feet above our intake tube, making a significant difference in our total lift and pumping efficiency and, consequently, increasing cost.

We wish to have it borne in mind, however, in planning for construction of dams that we will have additional land to be irrigated in this area and that the allocation of water for irrigation of these additional lands should be provided for at the time of planning for construction and operation of this dam or any future waterworks affecting the number of cubic-feet-per-second flow of water in the Yellowstone River at this point.

Also, the additional potential power that could be generated by these dams could serve as a stabilizing force to our future power needs as demand for power

in this area increases due to industrial expansion, more land coming under irrigation, and increase in private use.

Sincerely yours,

FORD E. MARTIN, *Manager.*

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
House of Representatives,
Washington, D. C.

DEAR SIR: Please give your consideration to the following statement of facts when you make your final decisions on the construction of additional power dams in Montana and more especially the proposed Yellowtail Dam in Big Horn County.

This group represents an irrigation pumping unit on the Hysham Bench designed and financed by the Montana State Water Conservation Board and operated by local users. This project receives power from Fort Peck Dam via Montana Dakota utilities to the local REA, which is, at the present time, unable to provide sufficient power for full capacity use.

The project is designed for 7,600 acres and will serve 5,500 acres during 1954. There are 1,000 acres in addition that would sign up for shares for 1954–55—the only limiting factor being shortage of power. We have a 350-horsepower installation which cannot be used until sufficient electric power is available.

The thing we face now is the probability of having to discontinue irrigating our present acreage, due to excessive maintenance costs. The distribution of costs on a 5,500-acre basis instead of the 7,600-acre basis creates somewhat of a squeeze.

I might further add that we in Montana are agreed that the Yellowtail and other projects are feasible and economically sound because of a continually increasing demand for power and the desirability of irrigating vast acreages of currently dry-farming land.

We sincerely hope that you members of this committee may see this project in a favorable light. It would seem to be a step in the direction of progress.

Sincerely,

HAROLD ZENT,
Chairman, Hysham Water Users Association.

QUARTER CIRCLE U RANCH,
Birney, Mont., April 20, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives
House Office Building,
Washington, D. C.

(Attention the Honorable Wesley A. D'Ewart.)

GENTLEMEN: The Yellowtail Dam under consideration for construction on the Crow Reservation along the Big Horn River in Montana would furnish needed electric power for many purposes and needs in southeastern Montana and northern Wyoming.

The Tongue River Reservoir, located 25 miles north of Sheridan, Wyo., has at this time a capacity of 65,000 acre-feet of water. The dam was constructed in such a way that storage capacity can be increased to impound 85,000 acre-feet of water. Tongue River has a large supply of water from the runoff of the Big Horn Mountains in Wyoming.

At present there are less than 20,000 acres of land under irrigation in the Tongue River Valley below the dam. There is a reclamation survey which shows this is only a small acreage compared to what could be irrigated.

The only feasible way of getting the water on much of the land is with pumping plants. That necessitates a large amount of electric power.

At the present time the Tongue River REA Co-op gets its power from the Montana Power Co. whose supply is limited.

As president of the Tongue River Water Users Association I highly recommend the construction of the Yellowtail Dam which will furnish needed electric power to the farmers and ranchers of the Tongue River Valley.

Your favorable action on the construction of the Yellowtail dam will be appreciated by all of us in the Tongue River Valley.

Sincerely,

JACK ARNOLD,
President, Tongue River Water Users Association.

GLENDIVE CHAMBER OF COMMERCE,
Glendive, Mont., April 20, 1954.

To Committee on Interior and Insular Affairs, Washington, D. C.

GENTLEMEN: With reference to the construction of the Yellowtail Dam on the Bighorn River, Montana, may we submit the following for your information:

The Yellowtail unit is a key structure in the overall resource-development plan which has as its objective the conservation, control, and beneficial use of the surplus waters of the Missouri River Basin. Yellowtail Dam, to be constructed on the Bighorn River, a tributary of the Yellowstone, will store spring flood flows and thus provide water for new irrigation, the generation of electrical energy, municipal and industrial purposes, and other uses. The control of floods, retention of silt, improvement of fish and wildlife resources, and creation of new recreational opportunities are other major benefits.

These are benefits that will be of great and lasting value, not only to the large area within the drainage basin of the Yellowstone River most immediately affected, but to the Missouri River Basin and the Nation as a whole.

The people of Glendive and neighboring communities are keenly aware that the benefits which accrue to the area as a whole definitely will add to their future prosperity and economic stability.

Thousand of acres of new land can be placed under irrigation if Yellowtail Dam is constructed. In addition, many thousands of acres of land now under irrigation will be assured of a firm water supply when a drought period again occurs. Farming and livestock raising are the primary income-producing activities of the huge area that will be most directly benefited by the construction of Yellowtail Dam. The stabilization of these industries through irrigation is a matter of great and continuing importance to Glendive and other eastern Montana communities.

Much of this new irrigation development cannot take place without a source of low-cost power for pumping. The Yellowtail powerplant will be the source of this power. Low-cost power for irrigation pumping is but one of the potential benefits of Yellowtail powerplant of primary importance to Glendive and neighboring communities. Yellowtail powerplant generation, integrated with the power produced at other powerplants, will insure adequate power for anticipated future economic expansion in this area. During the last several years, oil production, and associated activities have assumed major proportions in this area and this expansion is continuing. A substantial part of the Williston Basin, which promises to be one of the major oil-producing areas in the Nation, is within the market area of Yellowtail powerplant. Electric energy requirements have increased tremendously in this area and all indications are that requirements will continue to increase. The availability of additional supplies of hydroelectric power is a major necessity in the future economic growth of this community and neighboring communities.

This community has an equally alert interest in other potential benefits that will result through the construction of Yellowtail Dam. The Bighorn River is one of the greatest silt offenders in the Yellowstone River system. Retention of silt behind Yellowtail Dam will be of material benefit to residents of this Yellowstone area. Reduction of silt in the Yellowstone River will result in improvement of water for municipal and industrial uses. It will also reduce the detrimental effect on thousands of acres of irrigated land due to the application of silty irrigation water. It will reduce operation and maintenance for present irrigation systems and the new projects as they are constructed. Any reduction of silt in the Yellowstone River will improve its recreational values, particularly through improvement of fish habitat.

Any measure taken to control flood flows in the Yellowstone River will materially benefit Glendive. The flood-control benefits of Yellowstone Dam, regulating as it will the erratic and widely fluctuating flows of the Bighorn River, will be definitely measurable in this community.

W. J. VONDRASHEK,
Secretary-Manager, Glendive Chamber of Commerce.

BOARD OF CONTROL, LOWER YELLOWSTONE PROJECT
Sidney, Mont., April 16, 1954.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
House of Representatives,
Washington, D. C.

GENTLEMEN: The lower Yellowstone irrigation project comprising 60,000 acres in eastern Montana and western North Dakota, favors the construction of the Yellowtail Dam due to the fact that it will help to control silt and to stabilize the flow of the Yellowstone River which is the project's source of irrigation water.

Sincerely yours,

E. M. GARDNER, *Project Manager.*

MONTANA NORTH DAKOTA BEET GROWERS ASSOCIATION,
Sidney, Mont., April 15, 1954.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
House of Representatives,
Washington, D. C

GENTLEMEN: The Montana-North Dakota Beet Growers Association whose members are largely farmers on the lower Yellowstone irrigation project, are definitely in favor of constructing the Yellowtail Dam.

Our many water users know it will provide silt control and will stabilize the flow of the Yellowstone River. These facts are of great importance to all citizens in this area of Montana and North Dakota.

Very truly yours,

JOS STEINBEISSER, *President.*

SIDNEY CHAMBER OF COMMERCE,
Sidney, Mont., April 15, 1954.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
House of Representatives,
Washington, D. C.

GENTLEMEN: Our organization wishes to present our very sincere interest in the construction of the Yellowtail Dam. While we are distantly located near the Montana-North Dakota border, that project is of great importance.

The many water users in the lower Yellowstone are primarily interested in the fact that Yellowtail Dam will stabilize the flow of the Yellowstone River and will give us a way to control silt. These two items alone will be worth many thousands of dollars to the model lower Yellowstone irrigation project here in eastern Montana and part of western North Dakota.

Sincerely yours,

SIDNEY CHAMBER OF COMMERCE,
DAN C. PRICE, *Secretary-Manager.*

SHERIDAN CHAMBER OF COMMERCE,
Sheridan, Wyo., April 20, 1954.

Mr. HERB BUCK,
Secretary, Billings Chamber of Commerce,
Billings, Mont.

DEAR HERB: It has come to our attention that you are going to Washington in an effort to promote the completion of the proposed Yellowtail Dam project.

We would like to have you intercede in behalf of the Sheridan community toward bringing this power project to completion as quickly as is humanly possible.

Sincerely,

J. C. RHODES, *President.*

LAUREL COMMERCIAL CLUB,
Laurel, Mont., April 22, 1954.

Mr. J. CARTER JOHNSON,
Billings, Mont.

DEAR SIR: The Laurel Commercial Club has instructed me, as its secretary, to voice the approval of the club in the Yellowtail Dam project, and to endorse any endeavors that are likely to speed up the actual commencement of the project. Therefore, please be advised that if we can aid you in any way toward this end, we will be most happy to do so.

Cordially yours,

LAUREL COMMERCIAL CLUB,
By THOMAS L. BRADLEY, *Secretary.*

MONTANA STATE RURAL ELECTRIC COOPERATIVE ASSOCIATION, INC.

BILLINGS, MONT., *April 20, 1954.*

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives, Washington, D. C.

GENTLEMEN: My name is George Lackman, I am president of the Montana State Association of Electric Cooperatives. My home is at Billings, Mont., where I am engaged in farming 200 acres of irrigated land. I wish to present to your committee some facts and figures concerning the need we have for the Yellowtail Dam. The proposed location of the dam is approximately 30 miles southwest of Hardin and 35 miles southeast of Billings in Big Horn County on the Big Horn River.

I understand the Bureau of Reclamation has made numerous studies of this proposed project and have prepared plans and estimates of the dam structure itself, and, according to their findings, the dam will provide needed irrigation to a large area of approximately 44,000 acres, and, of course, the powerplant will have an installed capacity of 200,000 kilowatts, which is vitally needed as a source of power for electric loads that have and will develop in the area. These loads include the rapidly growing power needs of the Rural Electric Cooperatives in at least a 150-mile radius from the dam.

The rural electric cooperatives in Montana are vitally interested in both the irrigation and power phases of the development. The added irrigation will be particularly important to the rural electric cooperatives serving the area in which the irrigated lands will be located, but the benefit of the development in terms of a more stabilized agriculture, will extend over a much wider area. Anything which helps to stabilize the farm economy of Montana by mitigating the effects of drought and adding to the farm production which is protected from the hazards of a variable rainfall, will be important to Montana farmers and to the rural electric cooperatives which serve them with power.

It is the power which Yellowtail will produce which is our major concern, however. Rural electric cooperatives have grown rapidly in Montana and the part of Wyoming which can be served from the Yellowtail powerplant. They now serve a very large percentage of the farms in their service areas. They are big users of power. They will require still larger amounts in future years as farmers and other rural consumers take increased advantage of the opportunities for lightening their tasks and increasing their production with the aid of electrical equipment.

We are therefore deeply concerned that we shall have an ample supply of power. Moreover, it must be low-cost power to be of real benefit to consumers served by rural cooperatives in this area. Farms and ranches in Montana and Wyoming are far apart, and lines to reach them are costly. Even with wholesale power at low cost to the farmer, after distribution costs are added, is not as low as it ought to be to permit advantage to be taken of central station elecric service. If the wholesale price of power to the cooperatives is high, the price to the farmer is very restrictive. Many rural line extensions have been possible financially only with low-cost power. Higher wholesale costs could create very serious financial problems for many cooperatives.

It is therefore important to us that we have an adequate supply of low-cost power, both now and in the future. The Bureau of Reclamation has recently completed studies for the purpose of allocating the additional power available from the Federal power plants existing or now under construction in the Missouri Basin. The studies show that there will be enough power to supply pref-

erence customers in the western division, which includes Wyoming, until about 1960, although this will require the withdrawal of power from nonpreference customers. A very sizable block of Yellowtail power could be used in northern Wyoming in substitution for power from southern Wyoming and in meeting load growth in the Wyoming area, as soon as Yellowtail can be placed in operation.

In the western area of the eastern division, which comprises principally Montana, 94,000 kilowatts is available from existing Federal plants. Of this, about 24,000 kilowatts already committed and 31,000 kilowatts additional will be needed to meet the requirements of preference applicants through 1958, and about another 10,000 kilowatts to carry them through 1960. In addition there are 8 cooperatives, estimated to require 24,000 kilowatts by 1960, which presently obtain all or part of their power supply from the Montana Power Co While these cooperatives are presently receiving service from the power company at Bureau rates, there is some question whether this company will be able to continue service at this low rate, and the continuance of its present low rate is, in my opinion, directly related to the availability of low-cost Federal power. The sum of the preference loads for 1960 is 89,000 kilowatts or practically the entire existing Federal supply. Therefore, in this so-called western area, there will be a need for additional Federal power by about 1960 to meet preference customers requirements for which Yellowtail would be the answer.

There are, of course, other markets in Montana, southern Wyoming, and the Dakotas where Yellowtail power also could be used. I am confining my remarks to the need of preference customers, and particularly rural cooperatives with which I am most familiar. But I would like to stress particularly the situation in southeastern Montana and northeastern Wyoming. This is a big area which constitutes a power desert. Here and there a few small, isolated, high-cost powerplants meet local requirements on a limited basis. Elsewhere power is not available. As part of the Yellowtail development, transmission lines would be constructed in this area, which will mean lower-cost power for the scattered towns and make it possible to extend rural distribution lines to the farmers and ranchers. Power will be available for irrigation pumping, which can contribute importantly to the agricultural development of the area. Development of the natural resources of this area and other areas in which Yellowtail power can be supplied will also be helped, to the advantage of the entire area.

In conclusion, I wish to express the great interest and concern of our cooperatives in the development of the entire Missouri River Basin program, of which the Yellowtail development is a part. The Missouri Basin is a big part of the United States, and Montana is a large part of the Missouri Basin. Rural electric cooperatives are contributing a good deal toward making this large and mainly rural area a better place to live in and a more productive and prosperous part of the country. We want to continue and complete our job, and as soon as possible bring electric power to every farmer and rancher. An adequate supply of low-cost power will be necessary for this purpose.

The future of our Nation is more than ever dependent upon agriculture and related diversified farming, and we offer this as a big step forward in the future of our Nation as it affects a large segment of population in our great Northwest.

I wish to thank you for your courtesy in allowing the presentation of this statement.

WYRULEC CO.—REA,
Lingle, Wyo., April 16, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives, Washington, D. C.

GENTLEMEN: The continuing increase in consumer load has caused the management of the Wyrulec Co. deep concern over the possibility of a shortage of power in the next few years. It appears that the completion of the Yellowtail Dam would be a solution to this grave problem.

On behalf of the approximate 2,000 farmers who would be vitally helped by the assurance of sufficient power for their increasing needs, the Wyrulec Co. respectfully requests favorable action by the committee on the appropriation for the Yellowtail Dam in Montana.

Very truly yours,

WYRULEC CO.
IVAN M. WHIPPLE, *Manager.*

SHERIDAN-JOHNSON RURAL ELECTRIFICATION ASSOCIATION,
Sheridan, Wyo., April 15, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives, Washington, D. C.

GENTLEMEN: In behalf of the members and directors of the Sheridan-Johnson Rural Electrification Association, we respectfully request that favorable consideration be given to an appropriation for the construction of Yellowtail Dam. In the past there has been much argument for and against this project, but we feel the reasons for building the dam far outweigh the opposition.

Although we in northeastern Wyoming know the Yellowtail Dam is to be a multipurpose project, our primary interest is in the electric power output of the generators that will be installed. At the present time we have no high voltage power grid through this part of the State. Our only power source is private power plants which are small with a limited kilowatt output. Even though the State average wholesale power cost is approximately 7 mills, our costs have never been less than 10.37 mills per kilowatt-hour while in 1953 our average cost was 12.32 mills.

If the Yellowtail Dam is approved and an appropriation is made, this will open the way for a transmission line through this section of Wyoming which would link the dam with the Bureau of Reclamation grid in the Casper or Glendo area of Wyoming. This line would relieve the power situation in this immediate vicinity as well as furnish power for the development of oilfields and other natural resources in this corner of the State.

Our request for the Yellowtail Dam is not for selfish reasons; we believe the entire State of Wyoming will benefit, and especially the northeast section will realize power for the development of its resources. Again we ask that your committee act favorably on the appropriation for the Yellowtail Dam.

Very truly yours,

OLIN E. ROSE, *Manager.*

TRI-COUNTY ELECTRIC ASSOCIATION, INC.,
Sundance, Wyo., April 13, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives, Washington, D. C.

GENTLEMEN: It comes to my attention further consideration is presently being given to the construction of the Yellowtail Dam in Montana.

Information available to us indicate that studies have established sound basic feasibility for Yellowtail.

The need for power developed at Yellowtail is, I believe, established beyond question, with more power being hoped for than can ever be provided. The northeast part of Wyoming, with which I am most familiar, is often being referred to as a power desert, greatly in need of more power.

Our own system has already been greatly delayed in serving important loads in the area because of inadequate and high cost power.

Since projects the size of Yellowtail can usually be handled only by the Federal Government and since they result in benefits to the public generally it would seem fitting and proper and in the public interest to give all possible consideration to providing funds for the early construction of the Yellowtail Dam.

Very truly yours,

TRI-COUNTY ELECTRIC ASSOCIATION,
L. M. LORENZEN, *Manager.*

NIOBRARA ELECTRIC ASSOCIATION, INC.,
Lusk, Wyo., April 17, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives, Washington, D. C.

DEAR SIR: We wish to express our interest in the Yellowtail Dam and request favorable action by your committee on a special appropriation in the budget for this project. We feel the Yellowtail Dam is needed to insure a continued adequate supply of low cost power for rural and industrial establishments throughout the State of Wyoming.

Therefore, we respectfully request your earnest consideration of the Yellowtail Dam project.

Very truly yours,

NIOBRARA ELECTRIC ASSOCIATION, INC.,
ARTHUR J. SCHNOSE
(For E. L. Craig, Manager).

MID-YELLOWSTONE ELECTRIC COOPERATIVE, INC.,
Hysham, Mont., April 19, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives, Washington 25, D. C.

GENTLEMEN: We are writing you relative to the proposed Yellowtail Dam development.

We operate a rural electric cooperative in an area along the Yellowstone River which is very dependent on electric power for irrigation. We now have connected to our lines 32 electric irrigation pumps, totaling some 1,600 horsepower. Included in this group is one 1,000 horsepower installation which was installed by the State Water Conservation Board of Montana.

At the present time we receive our power from the Fort Peck plant which is over 300 miles from our system. Being on the end of a long line, our service is very unsatisfactory and at present we have a definite shortage of power. The State water conservation board has a 350 horsepower pump installed which cannot be operated until more power is available in the area. This unit is very badly needed as many fertile acres remain unirrigated until such time as sufficient power is available.

If the Yellowtail Dam were completed, a transmission line is planned to connect the Yellowtail plant to the Fort Peck facilities now in operation. When completed this would give us an adequate source of power and improved service due to the integration of the two generating plants.

Our cooperative, as well as the people of this entire area, respectfully request that a favorable appropriation be made for the development of Yellowtail Dam.

Yours very truly,

JOHN GRIERSON, *Manager.*

PARK ELECTRIC CO-OPERATIVE, INC.,
Livingston, Mont., April 14, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
Washington, D. C.

GENTLEMEN: We wish to urge you to give favorable consideration for appropriations for the Yellowtail Dam.

The overall use of electric energy in the United States is doubling about each 8 to 10 years and the needs of the rural electric systems are doubling every 4 to 5 years on the average.

Some of the territory that could be served by Yellowtail is short of power today, therefore the power shortage will be critical in the near future.

It is of utmost importance to the further development of agriculture in the Rocky Mountain West that an abundant amount of low-cost power be made available.

Again we urge you to give favorable consideration for appropriations for the Yellowtail Dam.

Yours very truly,

WM. H. SENNETT, *Manager.*

FERGUS ELECTRIC COOPERATIVE, INC.,
Lewistown, Mont., April 15, 1954.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
House of Representatives, Washington, D. C.

GENTLEMEN: Nineteen years ago the leaders of the largest electric utilities were saying that America had all the power it could use and there were no new markets in the foreseeable future to justify proposed construction of new power-producing dams, especially the large Federal-sponsored projects in the Northwest.

A great many of us today, standing in the shadow of present power supplies, may feel like the utility leaders 19 years ago. For us, the economic wheels of the Northwest are running well enough. Why think of the future? Actually, there was never a time in all history of the Northwest when the prosperity-creating forces of cheap Federal-sponsored electric power were as active as today.

Under the encouraging program of cheap and plentiful supplies of electric power, assured for this area by Federal programs of 1947 and 1948, new industries entered this area. New oil refineries were built at Billings, a refinery at Laurel was enlarged. Recently, the Yellowstone pipeline, costing millions, was started and will deliver refined products in 1954 over the Rock Mountains to Spokane, some 547 miles away. The full development of the Williston Basin oilfield of Montana-Dakota, opened in 1951, will require additional millions of invested capital and large quantities of cheap, abundant supplies of electric energy.

The agricultural users of cheap electric power have expanded their consumption by threefold in the past 10 years. New pumping loads for irrigation, the increasing numbers of electric space heating installations, and other farmstead uses will increase the demand for low-cost electricity far beyond present available production capacity of this area.

Population increases in this area add countless new users of electricity with new homes and attendant business organizations supplying the needs of the rapidly growing communities.

Gentlemen, it is a mistake for any of us to conclude that the power supplies of the Northwest are adequate for the future. Irresistible forces of our economic world are shaping a new prosperity. Have faith in the future.

We request your favorable report on funds for construction of Yellowtail Dam at an early date.

Sincerely yours,

C. W. RADER, *Manager.*

YELLOWSTONE VALLEY ELECTRIC COOPERATIVE, INC.,
Huntley, Mont., April 15, 1954.

INTERIOR AND INSULAR AFFAIRS COMMITTEE,
House of Representatives, Washington, D. C.

GENTLEMEN: The following is an excerpt from the minutes of the regular meeting of the board of trustees of the Yellowstone Valley Electric Cooperative, Inc., held in Huntley, Mont., April 10, 1954:

"Thereafter, the matter of the construction of Yellowtail Dam in Big Horn County, Mont., was considered and discussed, after which, on motion being duly made, seconded, and unanimously carried, the following resolution was adopted, to wit:

"'*Resolved*, That the board of our cooperative is in favor of the immediate construction of the Yellowtail Dam in Big Horn County, Mont., and urge construction thereof as soon as possible.'"

We are submitting this as evidence of the belief, on the part of the trustees of this cooperative, that Yellowtail Dam construction should be started at once so that the cooperatives in this area will be assured of an adequate supply of power in the future.

Yours very truly,

GEORGE LACKMAN,
Secretary-Treasurer.

Mr. BUCK. I would like to make this statement, that we think and we desire that the Congress should now, by resolution or however is the custom, to direct the Bureau of Reclamation to take all steps for securing a right-of-way for this Yellowtail Dam, for developing the plans, complete and detailed plans and specifications, and finally initiate construction of this Yellowtail Dam on the Bighorn River.

Mr. D'EWART. Mrs. Pfost, do you have any questions?

Mrs. PFOST. No, thank you.

Mr. D'EWART. Mr. Dawson?

Mr. DAWSON. No questions.

Mr. D'EWART. Thank you very much, Herb, for being here. I have on our list four more witnesses who wish to be heard. I will give their names, and then if there are any others they will come at the end—Mr. Kronmiller, Mr. Yellowtail, Mr. Wall, Mr. Kill.

Is there anyone else that wishes to be heard?

If not, the committee will recess until 2:15 when we will hear the four remaining witnesses.

(Whereupon, at 12:15 p. m., the subcommittee recessed until 2:15 p. m., this same day.)

AFTER RECESS

Mr. HARRISON. The committee will come to order.

STATEMENTS OF BERT W. KRONMILLER, TRIBAL ATTORNEY; ROBERT YELLOWTAIL, CHAIRMAN, CROW TRIBAL COUNCIL; WILLIAM A. WALL; AND JOHN HILL

Mr. D'EWART. Mr. Chairman, I have a communication addressed to Mr. Vernon signed by Mr. Cool, Mr. Ragland, and Mr. Bounous, dated February 6, 1954 attached to which is a letter directed to the Secretary of the Interior reading as follows:

We, the undersigned, are the owners of deeded lands within the Hardin unit of the Missouri River Basin project, which lands are susceptible of irrigation by works to be constructed under that unit. It is hereby requested that immediate steps be taken to initiate construction of the Hardin unit in order that water may be made available for the irrigation of our deeded lands. Deeded lands comprise some 60 percent of the lands within the Hardin unit. This unit is also urgently needed if the community is to grow as an essential part of the comprehensive program for the development of the Missouri River Basin.

It is further respectfully requested that detailed investigations of the irrigable area be completed as rapidly as possible and that economic studies be completed and irrigable area surveys be accomplished in the immediate future.

We are prepared to enter into the necessary contracts or agreements looking to the repayment to the United States of reimbursable construction charges and the costs of operating and maintaining the works necessary for providing water to our lands.

I ask that this be made a part of the record in full. It indicates the willingness of those concerned to sign contracts for the project. It should be made a part of the record immediately following Mr. Cool's statement this morning.

Mr. HARRISON. Without objection, so ordered.

(The information referred to follows:)

HARDIN, MONT., *February 6, 1954.*

Mr. KENNETH F. VERNON,
Regional Director,
Bureau of Reclamation, Billings, Mont.

DEAR MR. VERNON: Appended hereto you will find a letter, directed to the Secretary of the Interior, which is concerned with the Hardin unit-Missouri River Basin project located here in Big Horn County, Mont.

It is respectfully requested that you review this instrument and then transmit it on to the Secretary, together with a copy of this letter.

If it is possible for you to have six photostatic copies of this instrument made and returned to us for further use in our efforts on behalf of the project, it would be appreciated.

This letter, you will note, has been signed only by those individuals who are landowners and therefore those who will be directly affected by the development. Every landowner has signed the letter with the exception of 4 nonresident owners

(not living in Montana). Their holding represent less than 7 percent of the total deeded lands comprising the irrigable acreage.

In 1948 the 44,000 acres comprising the irrigable acreage of the Hardin unit was owned about as follows:

	Percent
Indian trust lands	50.2
Deeded lands	49.8

As near as we are able to figure at this date, the deeded lands account for some 60 percent of the acreage susceptable to irrigation and the Indian lands 40 percent. It will be noted that this percentage is changing rapidly in favor of the deeded lands as patents are coming into Indian hands everyday and supervised sales at the Crow Agency office are being conducted every 3 months.

It is our firm belief that this letter to the Secretary from the landowners to be affected by the development is a concrete expression of their interest in the Hardin unit and the progressive development of the entire Yellowstone watershed area here in Montana and Wyoming.

We wish to thank you for making a representative of the Bureau available to accompany our delegation. There were many questions asked that only a representative of the Bureau could properly answer.

Respectfully,

L. R. COOL,
SAM RAGLAND,
CHESTER A. BOUNOUS.

Hon. DOUGLAS MCKAY,
Secretary of the Interior,
Washington, D. C.

DEAR SIR: We, the undersigned, are the owners of deeded lands within the Hardin unit of the Missouri River Basin project, which lands are susceptible of irrigation by works to be constructed under that unit. It is hereby requested that immediate steps be taken to initiate construction of the Hardin unit in order that water may be made available for the irrigation of our deeded lands. Deeded lands comprise some 60 percent of the lands within the Hardin unit. This unit is also urgently needed if this community is to grow as an essential part of the comprehensive program for the development of the Missouri River Basin.

It is further respectfully requested that detailed investigations of the irrigable area be completed as rapidly as possible and that economic studies be completed and irrigable area surveys be accomplished in the immediate future.

We are prepared to enter into the necessary contracts or agreements looking to the repayment to the United States of reimbursable construction charges and the costs of operating and maintaining the works necessary for providing water to our lands.

Respectfully,

Sterling Tonke, Hardin, Mont.; Chester C. Bounous, Hardin, Mont.; W. L. Cooley, Hardin, Mont.; Harry Feller, Hardin, Mont.; Conrad Seader, Hardin, Mont.; Blanche B. Faber, Hardin, Mont.; Conrad Yerger, Jr., Hardin, Mont.; John S. Thompson, Hardin, Mont.; John Zuker, Hardin, Mont.; William Colstad, Hardin, Mont.; Carl W. Moore; Charles A. Corkins; Harry E. Cox, Hardin, Mont.; Charley S. Eder, Hardin, Mont.; Marie E. Eder, Hardin, Mont.; Bert Slater, Hardin, Mont.; W. J. Bukke, Hardin, Mont.; S. N. Cunningham, Hardin, Mont.; A. L. Torske, Hardin, Mont.; Mary B. Torske, Hardin, Mont.; Jake Lackman, Hardin, Mont.; Glen T. Gustafson, Hardin, Mont.; Cora C. Moore, Hardin, Mont.; W. B. Moore, Hardin, Mont.; Nils Ottien, Hardin; A. O. Gustafson, Hardin; A. G. Ballenzky, St. Jarvis; Richard E. Warren, Billings, Mont.; Charles E. Sweeney, Hardin, Mont.; Robert Torske, Hardin; Sam Ragland, Hardin, Mont.; Gerald D. Ragland, Hardin; Sam F. Ragland, Hardin; B. W. Ragland, Hardin; Vernard Melville, Hardin; Frank Kincaid, Hardin; Joseph Torske, Hardin; Mildred Ragland, Hardin; H. W. Willcutt, Jr., Hardin; L. V. Snyder, Hardin, Mont.; R. S. Randall, Hardin, Mont.; Walter Torske, Hardin, Mont.; Ed Torske, Hardin, Mont.; N. I. Goodell, Hardin, Mont.; Ida J. Brown, Hardin, Mont.; Ed Kopac, Hardin, Mont.; L. R. Cool, Hardin, Mont.

Acres owned by each individual signer

	Acres		Acres
Sterling Torske	394. 86	Chester C. Bounous	200
W. L. Cooley	361. 54	Harry Feller	160
Conrad Seader	186. 34	Blanch B. Faber	394. 67
Conrad Yerger, Jr	285. 26	John S. Thompson	112. 31
John Kukes	284. 61	William Colstad	750. 88
Carl W. Moore	135	Charles A. Corkins	1, 420
Harry E. Cox	470	Charles S. Eder	1, 135. 59
Marie E. Eder	200	Bert Slater	553
W. J. Brekke	160	S. N. Cunningham	160
A. L. Torske	829. 32	Mary B. Torske	263. 76
Jake Lackman	195. 93	Glen T. Gustafson	823. 57
Cora C. Moore	135	W. B. Moore	168. 25
Nils Ottun	9, 342. 95	A. O. Gustafson	1, 536. 24
A. G. Ballenskey	480	Richard Warren	20, 996. 61
Charles E. Sweeney	138. 43	Robert Torske	374. 32
Sam Ragland	320	Sam F. Ragland	4, 125. 99
Gerald D. Ragland		B. W. Ragland	451. 55
Vernard Melville	400	Frank Kincaid	800
Joseph Torske	669. 74	Mildred Ragland	728. 10
H. W. Willcutt, Jr	5, 022. 82	L. V. Snyder	291. 42
R. S. Randall	4, 370. 16	Walter Torske	1, 011. 52
Ed Torske	1, 138. 13	N. I. Goodell	80
Ida J. Brown	564. 43	Ed Kopac	5, 185. 22
L. R. Cool	320		
		Total	68, 127. 52

Mr. HARRISON. Where did we end up?

Mr. D'EWART. We finished with the witnesses and are now down to Mr. Kronmiller, Mr. Yellowtail, Mr. Wall, and Mr. Hill. I believe Mr. Kronmiller was the next witness.

Mr. HARRISON. If you will proceed in the order that you would like to proceed that will be agreeable with the committee.

Mr. KRONMILLER. Mr. Chairman and gentlemen of the committee, we are here in a group, the Crow Tribal Delegation and myself. First I want to make a statement here which is entitled "Statement of Bert W. Kronmiller, Tribal Attorney of Crow Indian Tribe, Hardin, Mont."

Preceding this statement I might say that my statement will not be in line with what the witness Bunston said with respect to Congressman Harrison's State. He made a statement that the dirt from Wyoming was deposited down in Montana.

Mr. Chairman and gentlemen of the committee, I am tribal attorney for the Crow Indian Tribe. This statement relates to the proposed legislation and action pertaining to construction of the Yellowtail Dam and Reservoir. The contemplated site or location of which was upon tribal treaty lands of the Crow Indian Tribe of Indians located within the exterior boundaries of the Crow Indian Reservation.

Since the reclamation bill has found it necessary and desirable to make a reappraisement of the economic feature of the proposed Yellowtail project the Crow Tribe deems it necessary and desirable to reappraise and inform the committee upon the legal aspects of the Yellowtail project. Likewise Congressman D'Ewart in his wisdom apparently is not overlooking this legal aspect since he has requested the admission into the record Solicitor Davis' opinion of February 4, 1954.

First, it should be understood by the committee that the proposed Yellowtail Dam site is located upon tribal treaty lands of the Crow

Tribe of Indians, which are within the exterior boundaries of the Crow Indian Reservation as defined by the treaty with the Crows made on May 7, 1868 (15 Stat. 649) and as such boundaries now exist. Likewise, a large portion of the reservoir resulting from the construction of the dam is upon like tribal treaty lands. In other words, the proposed dam and reservoir site is not located upon lands which have been allotted to individual Indians of the Crow Indian Tribe.

Therefore, one important question before the committee, and before the Congress as a whole, is whether under present existing legislation the legal right or authority exists in the United States to condemn a right-of-way for the proposed dam and reservoir site upon such tribal treaty lands without the consent of the Crow Tribe of Indians. In determining that question we must consider the following facts and existing laws.

As far back as 1920, the Congress enacted legislation assuring the Crow Indian Tribe that no additional irrigation system would be constructed on the Crow Reservation, without the consent of the Crow Indian Tribal Council. The act of June 4, 1920 (41 Stat. 751) section 8 provided:

> *Provided*, That no additional irrigation system shall be established or constructed by the Government for the irrigation of Indian lands on the Crow Reservation, until the consent of the tribal council thereto has been duly obtained.

Subsequently, and nearly 6 years later, this act of 1920 was amended by the Congress, by the act of May 26, 1926 (44 Stat. 658), and the identical provisions contained in section 8, of the original act was reenacted, to wit:

> *Provided*, That no additional irrigation system shall be established or constructed by the Government for the irrigation of Indian lands on the Crow Reservation, unless and until the consent of the tribal council thereto has been duly obtained.

It is also significant that section 10 of the act of 1920 further provided that:

> SEC. 10. That any unallotted lands on the Crow Reservation chiefly valuable for the development of waterpower shall be reserved from allotment or disposition hereunder, for the benefit of the Crow Tribe of Indians.

In other words, the Congress upon two occasions within a period of less than 6 years enacted legislation which required the consent of the Crow Tribal Council as a condition precedent to the construction of any irrigation system on the Crow Reservation.

It becomes pertinent to the issues involved for us to consider the history of the legislation which authorized construction of the Crow irrigation project. Authorization was made by Congress for the construction of the Crow irrigation project by the provisions in section 31 of the act of March 3, 1891 (26 Stat. 989). As a result of that authorization, the Crow irrigation project was constructed, and now comprises 11 separate units, all of which were constructed by the Government with Crow tribal funds. The Crow irrigation project consists of the following units:

Agency, Reno, Forty-mile and upper Little Horn No. 2, the diversions of which are from the Little Big Horn River; Lodge Grass No. 1 and Lodge Grass No. 2, the diversions of which are from Lodge Grass Creek; Soap Creek, diversion of which is from Soap Creek; the Big Horn, diversion of which is from the Big Horn River; Lost

Creek, the diversion of which is Lost Creek; Pryor and Coburn, the diversions of which are from Pryor Creek; the Government also acquired water from the Two Leggins Land and Improvement Co., predecessors of the Two Leggins Water Users Association, for the irrigation of 5,642.46 acres of Indian lands under the Two Leggins unit, a white-owned company irrigating white-owned lands as well as Indian lands, and also, water from the Bozeman Trail Ditch Co. for 1,961.34 acres of Indian lands located under the company ditch unit.

All of these units of the Crow Indian project were constructed between the year 1895 and the year 1924. Because of shortage of irrigation water on the Little Big Horn River watershed, it became necessary to construct the Willow Creek Dam in 1942 for the purpose of storage of floodwaters, in order to furnish sufficient irrigation water for those units of the project which had been constructed on, and received water from, the Little Big Horn River watershed.

As a result of the construction of the Crow irrigation project, the lands susceptible to irrigation under each unit were assessed with annual operation and maintenance charges. Likewise, contracts were entered into between the United States and landowners of the various units, providing for the repayment of construction costs. Numerous landowners, including both Indian and white owners, defaulted in making payment of the amounts levied and assessed against their lands, both for operation and maintenance charges and for construction costs under repayment contracts.

This caused a dilemna, and as a result thereof, it became necessary to enact legislation for the adjustment and settlement of these delinquent assessments, and likewise, to adjust numerous inequities which were prevalent. After numerous hearings before the committees of Congress, the act of June 28, 1946 (60 Stat. 333, 336) was passed by Congress, and again, again, and for the third time, Congress provided that no further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of the Crow Tribe, and further provided that such construction work on the Crow Indian Reservation shall not be undertaken by the United States without prior consent of the irrigation district or districts affected, and the Congress of the United States, and without the prior execution of repayment contracts by the non-Indian water users or irrigation district or districts, obligating the non-Indian lands for the payment of their share of such construction costs. Section 9 is as follows:

> Sec. 9. No further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe, (2) the irrigation district or districts affected, and (3) the Congress of the United States, and without the prior execution of repayment contracts by the non-Indian water users or irrigation district or districts, obligating the non-Indian lands for the payment of their share of such construction costs. The consent of the Crow Tribe shall be obtained by a majority vote of the general council of the tribe expressed at a duly convened meeting: *Provided, however,* That such consents shall not be necessary to construct laterals necessary to irrigate the lands within the Crow Indian irrigation project as now determined and classified as irrigable by the land designation committee report, as approved by the Secretary of the Interior in 1944.

In addition to provisions of section 9, supra, this latter act provided for the formation of irrigation districts by non-Indians owning land

under the Crow irrigation project; for the entering into contracts with the Government for the payment of construction charges on a per-acre basis over a period of 20 years, and further provided that as far as non-Indian lands are involved, the act shall cease to be effective when 2 years have elapsed from the date of its approval unless prior to that time the contracts contemplated in section 3 of the act have been executed, and releases required by section 2 of the act obtained.

Therefore, the act was the culmination of a controversy existing between the Crow Indians, the non-Indian landowners, and the United States Government. It was a settlement of the differences between the parties involved. In compliance with the act, irrigation districts were duly organized, all necessary contracts were entered into between the irrigation districts and the Government.

In other words, the parties involved have complied with the provisions of the act. Section 9 of the act is written in plain, clear language providing, that no further construction work on the Crow Indian Reservation shall be undertaken by the United States without the consent of the Crow Tribe, the irrigation district or districts affected, and the Congress of the United States. This letter which I present is addressed to the Montana congressional delegation dated April 23, 1954, from the Lower Little Horn and Lodge Grass Irrigation District and request that it be made a part of the record.

May I read this at this time?

This is addressed to the Honorable Mike Mansfield, United States Senator, Washington, D. C.; Hon. James E. Murray, United States Senator, Washington, D. C.; Hon. Wesley A. D'Ewart, Congressman, Washington, D. C.; Hon. Lee Metcalf, Congressman, Washington, D. C.

Mr. D'EWART. What was the date of the letter?

Mr. KRONMILLER. April 23, 1954.

Mr. D'EWART. I do not believe it has been received in my office.

Mr. KRONMILLER. We have an original copy, and if you have not received it we will get it to you.

Mr. D'EWART. That is why I have not received it.

Mr. KRONMILLER. (reading):

GENTLEMEN: The board of irrigation commissioners of the Lower Little Horn and Lodge Grass Irrigation District are informed that a hearing is being had on the matter of the construction of the Yellowtail Dam.

On the 28th day of June, in 1946, an act was passed by Congress which, among other things, authorized settlement by the non-Indian water users and the Crow Indians, as water users under the Crow irrigation project, and at the same time provided that irrigation districts must be formed by the non-Indian land owners within a period of 2 years, and that the non-Indian landowners must sign repayment contracts for the repayment of construction charges under the settlement provided for in that act of Congress. Section 9 of the act specifically provided that further irrigation construction work on the Crow Indian Reservation would not be done or undertaken without the consent of the irrigation districts, the Crow Tribe, and the United States. Acting upon the understanding that such statement in the law was a binding and valid enactment for the benefit of the water users under the Crow project, the non-Indian water users under said project organized irrigation districts as required by the act, and entered into the repayment contracts as required by said act of 1946.

If the Yellowtail Dam can be constructed without the consent of the irrigation districts, the consent of the Crow Tribe, and the consent of the United States, then, of course, upon the same theory, and upon the same premises, further irrigation works can be constructed at other points within the Crow Reservation by the United States without obtaining consent of the parties involved.

While it may be said that the Lower Little Horn and Lodge Grass Irrigation District would not be directly affected by the construction of the Yellowtail Dam, since the Yellowtail Dam is located on the Big Horn River, above the conflux of the Lower Little Horn and Lodge Grass watershed, still, we must be, and are, compelled to register and file objection to any contention that further irrigation works can be constructed upon the Crow Indian Reservation without the consent of the irrigation districts, as well as the consent of the Crow Tribe.

If such is not the law, then the non-Indian land owners located in the Little Big Horn River and Lodge Grass watershed have been misinformed and misled.

Very truly yours, Ernest Richards, chairman of board of irrigation commissioners.

Mr. KRONMILLER. As a result of this legislation, Solicitor Mastin G. White, of the Department of the Interior, on October 7, 1952, resolved in his opinion that:

In its essence a condemnation proceeding involves the taking of land against the will of its owner, irrespective of the owner's consent. Since any further irrigation developments on the Crow Indian Reservation are contingent, under present law, upon securing the consent of the Crow Indians, it is my opinion that the tribal lands needed for the Yellowtail dam and reservoir site cannot be acquired by means of condemnation proceedings. (See M–36148 opinion of Mastin G. White, dated October 27, 1952.)

After referring to section 8 of the act of 1920, as amended by the act of May 26, 1926 (44 Stat. 658, 660), Solicitor White says:

"Moreover, an even broader prohibition of a similar character was enacted in section 9 of the act of June 28, 1946 (60 Stat. 333, 336), which provides in part as follows:

" 'No further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe (2) the irrigation district or districts affected, and (3) the Congress of the United States * * * the consent of the Crow Tribe shall be obtained by a majority vote of the general council of the tribe expressed at a duly convened meeting'."

I request that the opinion of Solicitor White dated October 27, 1952, be made a part of the record.

Mr. HARRISON. No objection. So ordered.

(The information referred to follows:)

SOLICITOR WHITE'S OPINION

OCTOBER 27, 1952.

CONDEMNATION OF INDIAN LANDS NEEDED FOR THE YELLOWTAIL DAM AND RESERVOIR SITE

Crow Indian Tribe—Indian Allotted Lands—Indian Tribal Lands

Indian allotted lands required for the Yellowtail project can be condemned in accordance with the provisions of section 3 of the act of March 3, 1901, which subjects such lands to condemnation for public purposes in the same manner and to the same extent as lands owned in fee.

The Indian tribal lands needed for the Yellowtail dam and reservoir site cannot be condemned, because the Yellowtail project would be constructed within, and would provide for the irrigation of approximately 21,500 acres of Indian-owned land situated within, the exterior boundaries of the Crow Indian Reservation, and Congress has prohibited any further irrigation developments on the reservation without the consent of the Crow Indians.

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SOLICITOR,
Washington, D. C., October 27, 1952.

MEMORANDUM

To: The Secretary
From: The Solicitor
Subject: Condemnation of Indian lands needed for the Yellowtail Dam and Reservoir site.

You have requested that I express an opinion on the question whether it is possible under existing legislation to condemn the Indian lands that are needed for the proposed Yellowtail Dam and Reservoir site.

The proposed Yellowtail dam site is located in sections 18 and 19, T. 6 S., R. 31 E., Montana meridian. The dam would be constructed across the Big Horn River about three-fourths of a mile above the mouth of Big Horn Canyon, which is 35 miles southwest of Hardin, Mont. The Yellowtail Reservoir would extend south from the dam site along the Big Horn River bed to the vicinity of Kane, Wyo., a distance of about 72 miles. Approximately 42 miles of the length of the reservoir would thus lie within the exterior boundaries of the Crow Indian Reservation.

The dam site would consist entirely of Crow tribal land, and so would the reservoir site, except for one 40-acre Indian allotment. A total of 1,033.27 acres af allotted Indian land would be required for the camp site to be established in connection with the construction of the Yellowtail project. In all, 6,846.67 acres of tribal and allotted land would be required for the Yellowtail project, which is described as one having multipurpose features, among which are included flood-control, irrigation, and power development.[1]

Under the provisions of section 3 of the act of March 3, 1901 (31 Stat. 1084, 25 U. S. C., 1946 edition, sec. 357), allotted Indian lands are subject to condemnation for public purposes in the same manner and to the same extent as lands owned in fee. Consequently, the Indian allotments required for the Yellowtail project may be condemned in accordance with this section.

Except for the act of May 10, 1926 (44 Stat. 498), which authorizes the condemnation of the lands of the Pueblo Indians of New Mexico "for any public purpose and for any purpose for which lands may be condemned under the laws of the State of New Mexico, * * * there is no legislation which in specific terms authorizes the condemnation of Indian tribal lands.

It has been suggested, however, that Indian tribal lands may be condemned pursuant to section 1 of the act of August 1, 1888 (25 Stat. 357, 40 U. S. C., 1946 edition, sec. 257), which provides in part as follows:

"In every case in which * * * any * * * officer of the Government has been or shall be, authorized to procure real estate for the erection of a public building or for other public uses he shall be authorized to acquire the same for the United States by condemnation, under judicial process, whenever in his opinion it is necessary or advantageous to the Government to do so * * *."

Section 7 of the Reclamation Act of June 17, 1902 (32 Stat. 389, 43 U. S. C., 1946 edition, sec. 421), has also been suggested as a more specific source of authority for the condemnation of Indian tribal lands needed for reclamation projects. This section reads in part as follows:

"Where, in carrying out the provisions of this act, it becomes necessary to acquire any rights or property, the Secretary of the Interior is authorized to acquire the same for the United States by purchase or by condemnation under judicial process, and to pay from the reclamation fund the sums which may be needed for that purpose * * *."[2]

Different law officers of this Department have apparently entertained different views with respect to the question whether Indian tribal lands can be condemned under legislation which, in general terms, provides for the condemnation of land but which does not specifically refer to Indian tribal lands. For example, Acting Solicitor Kirgis in 1936 and Acting Solicitor Cohen in 1945 were seemingly doubtful that such legislation provided the authority for the condemnation

[1] See Missouri River Basin investigations staff, Billings area office, Bureau of Indian Affairs, Billings, Mont., Rept. No. 107 (August 1950).

[2] It should be noted, however, that the reclamation fund is no longer available unless specifically appropriated by Congress; see sec. 16, act of August 13, 1914 (39 Stat. 690, 43 U. S. C., 1946 edition, sec. 414).

of Indian tribal lands.[3] On the other hand, Solicitor Gardner in 1943 took the position that Indian tribal lands could be condemned under statutory provisions which authorized the Secretary of War, in general terms, to institute condemnation proceedings for the acquisition of "the necessary lands" or "any real property" required for certain purposes.[4]

For the reason discussed below, I do not believe that it is necessary in the present instances to express an opinion on the general question whether Indian tribal lands needed for a reclamation project can be condemned under section 1 of the act of August 1, 1888, supra, or under section 7 of the Reclamation Act, supra.

The construction of the Yellowtail project would result in the irrigation of approximately 44,000 acres of land which cannot now be irrigated. Of this acreage, approximately 21,500 acres are Indian-owned lands situated within the exterior boundaries of the Crow Indian Reservation. Hence 49 percent of the lands to be irrigated are Indian-owned lands within the reservation.[5]

The Crow Indians complained for a long time that the Government provided for them irrigation developments which they did not want, Congress finally heeded this complaint by declaring that no further irrigation construction work should be undertaken on the Crow Indian Reservation without the consent of the Crow Indians. Thus, it was provided in section 8 of the act of June 4, 1920 (41 Stat. 751, 753), that "no additional irrigation system shall be established or constructed by the Government for the irrigation of Indian lands on the Crow Reservation until the consent of the tribal council thereto has been duly obtained." This prohibition was repeated in virtually identical terms when section 8 of the 1920 act was amended by the act of May 26, 1926 (44 Stat. 658, 660). Moreover, an even broader prohibition of a similar character was enacted in section 9 of the act of June 28, 1946 (60 Stat. 333, 336), which provides in part as follows:

"No further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe, (2) the irrigation district or districts affected, and (3) the Congress of the United States * * *. The consent of the Crow Tribe shall be obtained by a majority vote of the general council of the tribe expressed at a duly convened meeting * * *."

It will be noted that the prohibitions contained in these statutes are sufficiently broad in scope to cover the construction of the proposed Yellowtail project. The prohibition in the 1920 act, as amended by the 1926 act, is upon the construction of any "additional irrigation system for the irrigation of Indian lands on the Crow Reservation" (approximately 29 percent of the lands to be served by the Yellowtail project would be "Indian lands on the Crow Reservation"); and the prohibition in the 1946 act is upon "further construction work on the Crow Indian Reservation * * * By the United States" (the Yellowtail dam would be constructed "on the Crow Indian Reservation * * * by the United States").

The 1946 prohibition upon further construction work on the Crow Indian Reservation by the United States without the consent of the Indians was adopted by Congress subsequent to the approval by Congress, in section 9 of the Flood Control Act of December 22, 1944 (58 Stat. 887, 891), of the plans of development for the Missouri River Basin that included the Yellowtail project.[6] Therefore, it seems clear that the approval of the plan for the Yellowtail project was thereafter qualified by and made subject to the prohibition contained in section 9 of the 1946 act.

Moreover, section 9 (c) of the Flood Control Act of 1944 expressly provides that "irrigation of Indian trust and tribal lands shall be in accordance with

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[3] See memorandum dated July 8, 1936, from Acting Solicitor Kirgis to the Commissioner of Indian Affairs, and statement made to the Senate Committee on Indian Affairs on October 9, 1945, regarding S. J. Res. 79, 79th Cong., by Acting Solicitor Cohen, who is the author of the Handbook of Federal Indian Law (Washington, 1942).

[4] See letter dated June 29, 1943, relating to proceedings for the condemnation of an area of tribal land which was part of the Fort Hall Indian Reservation in Idaho for the Pocatello Airbase. It was stated in the letter that "the Solicitor (referring to Solicitor Gardner) does not believe that there can be any successful challenge to the legal authority of the United States to condemn tribal lands for a wartime need," under statutory provisions that are now codified as 10 U. S. C., 1946 ed., sec. 1343b, and 50 U. S. C., 1946 ed., sec. 171.

[5] See telegram dated October 16, 1952, from Billings office of Bureau of Reclamation to the Commissioner of Reclamation. See also Senate hearings on Interior Department appropriation bill for 1950, pt. I, p. 1007.

[6] That section approved, among other things, the plans contained in S. Doc. 191, 78th Cong., which included the Yellowtail project.

the laws relating to Indian lands." Among these laws are, of course, the provisions of section 8 of the 1920 act, as amended in 1926, and of section 9 of the 1946 act, prohibiting further irrigation developments on the Crow Indian Reservation without the consent of the Crow Indians.

In its essence, a condemnation proceeding involves the taking of land against the will of its owner, or irrespective of the owner's consent. Since any further irrigation developments on the Crow Indian Reservation are contingent, under present law, upon securing the consent of the Crow Indians, it is my opinion that the tribal lands needed for the Yellowtail Dam and Reservoir site cannot be acquired by means of condemnation proceedings.

MASTIN G. WHITE, *Solicitor.*

Subsequently, and on February 3, 1954 (M–36148 Supp.), the present Solicitor, Hon. Clarence A. Davis, made a diverse opinion and stated that:

It is my opinion that there is authority in the Department to proceed with the construction of the Yellowtail Dam and to bring such condemnation actions as may be necessary under the provisions of the existing reclamation laws to acquire possession and title thereto.

In reaching his conclusion, Solicitor Davis says in his opinion:

An extensive examination of this entire situation has been made by this Department and the following conclusions arrived:

(*a*) The Yellowtail Dam and Reservoir was specifically authorized and approved by the Congress as a part of the Flood Control Act of 1944.

(*b*) The previous opinion of this Department is largely based upon a provision of the act of June 8, 1946, which said:

"No further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe, (2) the irrigation district or districts affected, and (3) the Congress of the United States."

Taken alone and by itself, this language might be construed to prevent the construction of the Yellowtail Dam on the Crow Indian Reservation. An examination of that act and of its history, however, gives a different meaning to the language above set forth.

Solicitor Davis further says in his opinion:

To understand the act, it is necessary to recall that there is an already existing Crow irrigation project on the reservation, and that the Crows had previously complained to Congress that they were not in favor of the extension of that project; that they were being given irrigation systems which they did not want, to irrigate lands which they did not wish to irrigate, etc.

Continuing, Solicitor Davis further says:

Attention should first be directed to the title of the act of 1946, which is, "To provide for adjustments in connection with the Crow irrigation project, Crow Indian Reservation, Mont." The act, therefore, obviously was intended to apply to the existing irrigation project, and no mention of the Yellowtail Dam is made in the title or the body of the act. Furthermore, this department in its reports on the bill stated:

"Section 9 of the bill would prevent new construction on the Crow project, without the prior consents and replacement contracts required thereunder."

Still further, the committee reports of the House and Senate indicate clearly that the Yellowtail Dam was not in the contemplation of the Congress in connection with the 1946 act.

Mr. D'EWART. Mr. Kronmiller, you do not intend to indicate that that was the end of the Solicitor's opinion?

Mr. KRONMILLER. No; I have the Solicitor's opinion introduced here, the entire opinion.

Mr. D'EWART. It goes on?

Mr. KRONMILLER. There are other provisions of his opinion and I am only quoting those statements which I am now going to refute.

Gentlemen of the committee, converse to the statement made by Solicitor Davis in his opinion, I wish to call your attention to the statement made by the Hon. Kenneth R. L. Simmons, district counsel for the Indian Service of Billings, Mont., at the hearing on the 1946 act on April 13, 1945, before the subcommittee of the Committee on Indian Affairs. Mr. Simmons' statement is set forth on pages 4 and 5 of the hearing, and among other things, he said:

"The legislation proposes to accomplish the following:"

there were several different provisions, but section 6 is as follows:

"6. No further irrigation construction work to be done upon the Crow Indian Reservation without the consent of the United States, the Crow Tribe, and the irrigation district holding contracts pursuant to this legislation, and then only upon the execution of suitable repayment contracts."

Again, contrary to Solicitor Davis' statement that the Yellowtail Dam was not in the contemplation of Congress in connection with the 1946 act, I call your attention further to the statement made by Harry Whiteman, secretary, Crow Tribal Council as set forth in the report of the hearings of the Senate Committee on Indian Affairs of April 27, 1946, which is set forth on pages 24 and 25 of the record, to wit:

Senator WHEELER. Mr. Whiteman, you are the secretary of the Indian Council out there where this project is established?

Mr. WHITEMAN. Yes, Senator.

Senator WHEELER. What have you to say about this bill?

Mr. WHITEMAN. I shall be glad to make my statement.

Senator WHEELER. Are the Indians familiar with the bill? They are in favor of it. Are they?

Mr. WHITEMAN. Mr. Chairman, some portions of the bill apply to some who not Indians, since all the irrigable lands are not in the Crow Reservation.

The Indians' interests will be found in sections 8 and 9, I think, and as far as sections are concerned with respect to the Crow Tribal Reservation, I can only say this, Mr. Chairman, that these operation and maintenance assessments have been a very difficult problem and very difficult to meet because of the reason that a lot of these lands are owned by old people, the elder members of the tribe.

In reply to Solicitor Davis' contention that no mention is made of the Yellowtail Dam in the title or body of the act of 1946, it is likewise apparent that no mention is made of the Yellowtail Dam in the title or body of the Flood Control Act, which is the legislation upon which he relies for authority to condemn the tribal lands for use in construction of the dam.

On other other hand, it must be borne in mind that the act of 1946 relates to a specific matter, to wit, the prohibition of further construction work on the Crow Indian Reservation. Also, contrary to the prohibition relating to further construction on the Crow project as Mr. Davis pretends to interpret the act, the provisions of section 9 thereof specifically provide for the prohibition of further construction on the Crow Reservation without the consent of the Crow Tribe.

Nothwithstanding the prohibitions requiring consent of the Crow Tribe and the irrigation districts set forth in section 9 of the act of 1946, Solicitor Davis contends in his opinion that:

The Congress has specifically authorized the Yellowtail Dam as a reclamation and power development, and has provided that in undertaking such projects the Secretary of the Interior shall be governed by the Federal Reclamation Laws (Flood Control Act of 1944, 58 Stat. 887).

This statement is made by Solicitor Davis, notwithstanding the following provision contained in section 9 (c) of the Flood Control Act of 1944, (58 Stat. 887), which reads as follows:

(c) Subject to the basinwide findings and recommendations regarding the benefits, the allocations of costs and the repayments by water users, made in said House and Senate documents, the reclamation and power developments to be undertaken by the Secretary of the Interior under said plan shall be governed by the Federal Reclamation Laws (act of June 17, 1902, 42 Stat. 388, and acts amendatory thereof or supplementary thereto), except that irrigation of Indian trust and tribal lands, and repayment therefor, shall be made in accordance with the laws relating to Indian lands.

Contrary to the opinion of Solicitor Davis, his predecessor in office, Solicitor White said:

The 1946 prohibition upon further construction work on the Crow Indian Reservation by the United States without the consent of the Indians was adopted by Congress subsequent to the approval by Congress, in section 9 of the Flood Control Act of December 22, 1944 (58 Stat. 887, 891), of the plans of development for the Missouri River Basin that included the Yellowtail project. Therefore, it seems clear that the approval of the plan for the Yellowtail project was thereafter qualified by and made subject to the prohibition contained in section 9 of the 1946 act.

Moreover, section 9 (c) of the Flood Control Act of 1944 expressly provides that, "irrigation of Indian trust and tribal lands shall be in accordance with the laws relating to Indian lands." Among these laws are, of course, the provisions of section 8 of the 1920 act, as amended in 1926, and of section 9 of the 1946 act, prohibiting further irrigation developments on the Crow Indian Reservation without the consent of the Crow Indians.

If it can be said under existing laws that there is authority in the department to proceed with the construction of the Yellowtail Dam, and bring such condemnation actions as may be necessary to accomplish that purpose, without acquiring the consent of the Crow Tribe, and the consent of the irrigation districts, as has been opined by Solicitor Davis, then it is definite that the Crow Tribe of Indians, and the irrigation districts involved, have been treacherously misled and deceived.

Such conclusion would necessarily result from such contention, since one of the outstanding considerations of the parties involved, to wit, the non-Indian (white) landowners and the Crow Tribe, when they complied with, and performed the conditions required by the act of 1946, was the benefits offered by section 9 thereof, which is to say, the prohibitions against further construction work on the Crow Indian Reservation without the consent of the Crow Tribe and the irrigation districts.

It was the attractive and fundamental feature of the legislation that induced the parties to support the enactment of the act, and after enactment, the principal inducement to comply with the act. Surely, it was not the purpose or intent of the Congress, or any department of the Government to perniciously mislead either the Crow Tribe or the Indian landowners.

The proposed Yellowtail Dam is a multipurpose dam, and one of the objects of its construction is to irrigate 21,500 acres of Indian-owned lands with the Crow Reservation. Bearing this in mind, it cannot be validly said that there is any existing legislation which authorizes or permits the United States to condemn tribal treaty lands of the Crow Indian Reservation, for the purpose of further construction of irrigation work thereon, without first obtaining the consent of the Crow Tribe of Indians, as specifically required by the acts of Congress to which I have heretofore referred.

Therefore, under the fifth amendment to the Constitution of the United States, there has not been due process of law, and before any further construction work on the Crow Indian Reservation may be undertaken by the United States without the prior consent of the Crow Tribe, specific legislation must be enacted for that purpose. To say otherwise would be to deprive the Crow Indians of their property without due process of law.

I want to say further in this statement at this time that past records indicate it has been the policy of the Congress when considering the use of Indian tribal treaty lands for use in development of power, irrigation, and flood-control projects to deal directly with the particular Indian tribe involved.

I can see no reason why there should be any change made in that policy in negotiating with the Crow Tribe for the site of the Yellowtail Dam and Reservoir. I wish to thank you for listening to my statement.

Next, who will succeed me is Mr. Robert Yellowtail, chairman or the Crow Indian Tribal Council.

Mr. HARRISON. You may proceed, Mr. Yellowtail.

Mr. D'EWART. Could I ask a question or two? Your remarks have all been addressed to the tribal Indians lands, they do not have anything to do with the private land, State land, or public lands?

Mr. KRONMILLER. That is correct, Congressman D'Ewart.

Mr. D'Ewart. Is it not a rule of law that a subsequent Solicitor's opinion prevails over a former Solicitor's opinion and is the law of the land until it is either set aside by the courts or by the Congress?

Mr. KRONMILLER. I would not say that a Solicitor's opinion was the law. It might be considered to be law by the Department, but I do not know the rule here, the governmental rule, Congressman D'Ewart. I do know this, that there have been two diverse opinions, and they are directly opposite from each other, one contending that the consent of the Crow Tribe and the irrigation districts is necessary before any further construction can be done on the Crow Indian Reservation, and the other opinion says, which is the latter opinion, that the Department is authorized to condemn the land for the purpose.

Mr. D'EWART. Now if it is true that there is any validity in the views which you have expressed, would not the proper procedure be for the Department of Interior to start a condemnation proceeding and then you present your views to the court in the course of that condemnation proceeding?

Mr. KROMILLER. I would not say that that would be the policy of the Congress. That could be presented in that manner.

Mr. D'EWART. Would not that be a simple way to plead the facts as you have presented them?

Mr. KROMILLER. It could be.

Mr. D'EWART. The very first time that the Department brought a condemnation proceeding, you would plead these facts as you have presented them today, and then the courts would determine whether the final Solicitor's opinion prevailed and was the law or not?

Mr. KRONMILLER. If the committee would want to tie the matter up in court for a period of time that procedure could be had, but as I said in my previous statement, the policy apparently of Congress in dealing

with treaty lands, lands whereby a treaty has been made between the Government and the tribe of Indians, the policy in the past has been to deal directly—that is, Congress to deal directly—with the Indians relative to acquiring rights-of-way for the construction of dams and reservoir sites, and that has been more recent I believe in the Garrison Dam matter.

I do not believe there was ever any condemnation action commenced.

Mr. D'EWART. No, we did not condemn, we dealt through the Justice Department and the Department of Interior. I had quite a bit to do with that matter. In the present instance a suit would give a judicial opinion as to the law in the case that is whether your opinion prevailed or the Solicitor's opinion prevailed? Is there any other way to determine that?

Mr. KRONMILLER. Such a suit would make that determination.

Mr. D'EWART. There is no other way that it can be determined, is there?

Mr. KRONMILLER. You mean as far as the court is concerned?

Mr. D'EWART. As far as the Congress, the tribe and the court are all concerned? In other words, you have to go into court to determine the law?

Mr. KRONMILLER. Well, I would not say that there was not any other way. I think that Congress could deal with this tribe of Indians.

Mr. D'EWART. You cannot deal with an unwilling tribe.

Mr. KRONMILLER. In reply to that, Congressman, I think I should make this statement at this time if I may. I was not acquainted with the dealings between the Bureau of Reclamation and the Crow Indians until of recent date. However, on December 28, 1953, the Reclamation Bureau sent the representative to the Crow Tribal Council which was held on that day in Crow Agency, Mr. Kenneth Vernon.

A transcribed record was taken of that meeting by a voice recorder, and Mr. Vernon made this statement to the Crow Tribe of Indians, or words to this effect:

"I am here to offer you a million and a half dollars for the Bureau for the Yellowtail Dam site and reservoir. You will receive no more and no less. There is no use of dealing further, you must either take it or leave it."

That was the remark made by Mr. Vernon of the Bureau of Reclamation. So that on that basis I think hardly anyone would have dealt with them as far as the last offer that was made and the last negotiation, or offer of negotiation, made by the Bureau of Reclamation.

Mr. D'EWART. I think that I should state it has always been the desire of this committee to reach a friendly and equitable settlement in cases where in the public interest, lands must be taken. We have built projects on many reservations. We have considered them on other reservations where they have not been built. I have always held that a settlement should be reached before construction is started. We did not do that in the case of Garrison. It was proposed we should not do it in the case of a reservation in the Colorado Canyon, but it seems to me that effort should be made.

But in the event that equitable and fair settlement cannot be reached and it is in the public interest that the project should go forward, then action must be taken. I think you will agree with that?

Mr. KRONMILLER. Yes.

Mr. D'EWART. Thank you.

Mr. HARRISON. Proceed, Mr. Yellowtail.

Mr. WESTLAND. Mr. Chairman?

Mr. HARRISON. Yes.

Mr. WESTLAND. I have heard quite a bit of testimony that you must obtain the consent of the Crow Tribe before construction of this project.

Mr. KRONMILLER. Yes, Congressman.

Mr. WESTLAND. I have not heard you say that the Crow Tribe objects to this. Is that a fact? Do they object to the construction of the Yellowtail project?

Mr. KRONMILLER. Mr. Yellowtail will take that up later. They do object under the present offer, yes.

Mr. WESTLAND. They do object to the construction of the project under the present offer?

Mr. KRONMILLER. Yes.

Mr. WESTLAND. Could you tell me why they object?

Mr. KRONMILLER. I would rather Mr. Yellowtail, chairman of the tribal council, do that; he is better acquainted with that than I am.

Mr. WESTLAND. How much damage do you estimate will be done to Indian lands by this project?

Mr. KRONMILLER. I am not acquainted with the actual figure of damage.

Mr. WESTLAND. Well, you have mentioned a figure of $1.5 million. I had seen another figure of $35,000. There is apparently quite a great discrepancy between those two figures?

Mr. KRONMILLER. I have seen those two figures, yes.

Mr. WESTLAND. You say you are not prepared to answer any of those questions that I have asked you, is that correct?

Mr. KRONMILLER. That is correct.

Mr. WESTLAND. That is all, Mr. Chairman.

Mr. HARRISON. Mr. Budge, do you want to ask any questions?

Mr. BUDGE. No, Mr. Chairman.

Mr. HARRISON. Proceed, Mr. Yellowtail.

Mr. YELLOWTAIL. Mr. Chairman, Members of the Congress, my name is Robert Yellowtail. I am the present chairman of the Crow Tribal Council and as such it has been my work, my duty, to appear to convene the Crow Tribal Council for the discussion or any and all of these matters that have been discussed here today and in general to conduct the tribal business so that the will of the Crow Tribe as is marked down in the constitution and bylaws will be carried out faithfully.

I have here, Mr. Chairman, the Crow tribal constitution and bylaws which was approved by the Interior Department here and under which we operate. I think the committee ought to know something about this because these matters come up continuously, and I want to quote a few pertinent portions of this and then give it to the recorder here for inclusion as part of my remarks.

I want to quote article I:

> The Crow Tribal Council shall be composed of the entire membership of the Crow Tribe.

Under that article, Mr. Chairman and members of the committee, no Crow Indian—no Crow Indian, not one, is barred in any tribal council meeting from obtaining the floor and discussing any matter

before the tribal council to his complete satisfaction; that right has always been accorded to any and every Crow Indian who elects to attend any of the tribal councils that are called and for which notices are posted in every district of the Crow Indian Reservation at the post office and mailed to various members by the secretary of the Crow Tribal Council. So that one provision removes any doubt as to any action on the part of the chairman that somebody is being barred from having his say in court before the tribal council.

The Crow Tribal Council is not called solely by the will of the tribal chairman. Section 4 on page 2 reads as follows:

The chairman shall convene a session of the council upon petition of:
(*a*) Any district of the Crow Reservation.
(*b*) Upon petition of any sizeable group of Crow Indians for good and sufficient reasons.
(*c*) The chairman shall give 7 days' advance notice of such call in all of the 6 districts of the Crow Reservation.

So that that enlargement of what I said a while ago puts it beyond argument whatsoever that no Crow is barred up here and on the question of the Crow Council's consideration of the Yellowtail Dam the matter was placed squarely before any and every Indian that wants to come.

I want to say here that you can never get all of the Indians into the tribal committee room because that is a physical impossibility. The Republican Committee and the Democratic Party call a meeting at Helena, Mont. Those that get elected to attend, those are elected and want to stay home, they do. When the primary elections are on only 40 percent usually come and vote in an off-year election. The rest elect to stay home, and nobody raises any complaint. Likewise in the Crow Council when we give sufficient notice according to the constitution, which is 7 days, and those that do not come according to the tribal council provisions on page 3, section 7, which reads as follows:

The American system of "majority rule" used in the Congress of the United States shall prevail in the decisions of the Crow Tribal Council in regularly called and duly assembled conventions, and its majority decision shall be conclusive and binding over the losing minority.

That is all I care to quote. I just want to make it plain that the Crow tribal constitution approved by the Secretary of the Interior in the last administration, the Commissioner of Indian Affairs, permits any and every Crow that wants to have his say before the tribal council is absolutely free to do so and there are no bars.

I offer this for the record at this point.

Mr. HARRISON. Without objection, so ordered.

(The information referred to follows:)

CONSTITUTION AND BYLAWS OF THE CROW TRIBAL COUNCIL

PREAMBLE

The Crow Tribe of Indians, in an effort to enforce the respect of their basic human, constitutional and treaty rights, do hereby reestablish the Crow Tribal Council to represent, act, and speak for the Crow Tribe in any and all tribal matters, and to promote the general welfare of the Crow Tribe, do adopt the following constitution and bylaws for the conduct of Crow tribal matters in conjunction with the lawful right of the Bureau of Indian Affairs to conduct same.

ARTICLE I

The Crow Tribal Council shall be composed of the entire membership of the Crow Tribe.

ARTICLE II

The chairman and secrtary shall be elected to hold office for 2 years.

ARTICLE III

Any duly enrolled member of the Crow Tribe, except as herein provided, shall be entitled to engage in the deliberations and voting of the council, provided the females are 18 years old and the males 21 years.

ARTICLE IV

All nominations for officers of the council and any other tribal matters before the council shall be by voice, standing, hand raising, or secret ballot, as the council shall elect at each of its meetings.

ARTICLE V

The Crow Tribe, through its tribal council, reserves until itself the right to remove for cause any officer of the council, for misconduct or negligence or non-diligence in connection with the protection of the rights of the Crow Tribe in its relations with the Bureau of Indian Affairs or the local employees.

ARTICLE VI. THE POWERS, DUTIES, AND FUNCTIONS OF THE COUNCIL

1. The council shall establish its own rules of procedure.
2. The council shall meet on call of the chairman and as often as Crow tribal business makes necessary.
3. The council shall elect every 2 years, in conformity to its rules of procedure, a chairman, vice chairman, secretary, and vice secretary. The chairman shall have no vote unless there be a tie vote before the council, but shall be eligible to comment upon any question before the council.
4. The chairman shall convene a session of the council upon petition of—
   (*a*) Any district of the Crow Reservation.
   (*b*) Upon petition of any sizable group of Crow Indians for good and sufficient reasons.
   (*c*) The chairman shall give 7 days' advance notice of such call in all of the six districts of the Crow Reservation.
5. If the Government desires to present any matter to the council for its action, they, too, shall present such request to the chairman, who shall, as herein provided, advertise such request as provided, and set the date for the council's session.
6. Except where otherwise specified in this constitution and bylaws, decisions of the council shall be by a simple majority of the votes cast.
7. The council shall perform the duties assigned to it under this constitution and bylaws and shall have such powers in addition to those expressly conferred on it thereunder as may be necessary to achieve its effective operation and to realize its objective.
8. The council shall not, except by unanimity of the votes cast, delegate the exercise of any of its powers or functions. The council may at any time revoke such delegation of its powers by a simple majority vote.
9. The council may, if it desires, and in accordance with its own rules of procedure, elect annually an executive committee of 6, 1 from each of the districts of the Crow Reservation, to act as an investigating committee to inquire into and report to the council its finding and recommendations on every question assigned to it and shall be responsible to and work under the general direction of the council.

ARTICLE VII. STATUS AND FUNCTIONS OF THE COUNCIL

1. The Crow Tribal Council is the voice of the Crow Tribe.
2. The Crow Tribal Council is the medium, the body, the tribal organization through which the Crow Tribe speaks to the Government and the general public.
3. The council, represening the entire Crow Tribe, shall voice the opinions, wishes, sentiment, hopes, and decisions in any and all tribal matters for the

Crow people to the Congress and the Interior Department, by resolutions and through tribally elected delegates who shall, under instructions of the council, proceed to Washington or elsewhere to present in person such decisions and their own arguments and appeals in support thereof as the council shall direct by majority vote.

4. Subject to existing Federal law which endows the Congress with plenary powers over the Indians in their tribal state, and which in turn passes such authorities down the line to the Secretary of Interior and the Commissioner of Indian Affairs, who by regulations based upon acts of the Congress, control the management of Indian affairs subject to constitutional limitations. The Crow Tribal Council, without legal status as such, but being the mouthpiece and the voice of the Crow people, will from time to time call to the attention of the Congress its views and wishes with respect to the administration of its rights, property, and affairs by the Bureau of Indian Affairs.

5. Because of existing law governing Indian administration by the Congress herein pointed out, the Crow Council admits its limited authority in the administration of its own tribal matters, but also, understanding the constitutional limitations of the Government in this same field, the Crow Tribal Council will sponsor all legislation with State, Federal, and local governments on behalf of the Crow Tribe, and will, through tribal council resolutions and elected delegates and representatives, consult with and otherwise deal with representatives of the department of the Government of the United States on all matters affecting the interests of the Crow Tribe.

6. The Crow Tribal Council, which encompasses the entire membership of the Crow Tribe, so far as the Crow people are concerned, shall be supreme in determining by a majority vote of those attending, any course of action taken which is designed to protect Crow tribal interests.

7. The American system of "majority rule" used in the Congress of the United States shall prevail in the decisions of the Crow Tribal Council in regularly called and duly assembled conventions, and its majority decisions shall be conclusive and binding over the losing minority.

8. The Bureau of Indian Affairs, being a part of the United States Government, shall in no wise interfere directly or indirectly through its field representatives or agents with the deliberations or decisions of the Crow Tribal Council. The council, existing under legal handicaps herein pointed out, belongs to the Crow Tribe only, and not the Government, and as such will make its decisions without Indian Bureau interference or advice, inasmuch as the Indian Bureau, under the broad powers in Indian administration conferred upon the Congress and the Indian Department by both the Congress and the courts, can and does nullify Indian tribal council actions the country over when same takes issue with its own views. However, the Crow Tribal Council, regardless of same, hereby reserved unto itself the right to initiate moves looking to the protection of the Crow tribal rights and interests under their treaties and under American constitution guaranteeing all basic human rights to all who live under the American flag, and to the equal protection of the laws of our country.

9. The Crow Tribal Council in a duly called session will decide the manner of voting, whether by districts or in the council itself or whether by secret ballots in the districts or in the council, and on this issue the local Indian Bureau representatives will have no voice whatsoever—the council reserves this right unto itself.

10. Every member of the Crow Tribe, outside of the exception herein provided for, shall have equal opportunities to discuss and every question of tribal concern before the council, and to participate, without interference, in all votes taken upon any such questions.

ARTICLE VIII

1. Amendments. This constitution and bylaws may be amended by a majority vote of members of the Crow Tribe at a meeting of the Crow Tribal Council providing that a quorum as required by the bylaws of the Crow Tribal Council is present.

BYLAWS

ARTICLE I. DUTIES OF CROW TRIBAL COUNCIL

Section 1. The chairman of the council shall preside over all meetings of the council, perform all duties of the chairman, and exercise any and all authority detailed by the council, and shall be entitled to vote only in case of a tie.

Section 2. The vice chairman shall assist the chairman when called upon so to do; in the absence of the chairman, shall preside and when so presiding shall have all the privileges, duties, and responsibilities of the chairman.

Section 3. The secretary of the council shall forward a copy of the minutes of all the meetings to the superintendent of the reservation, and the Commissioner of Indian Affairs, and the regional director, and shall conduct all correspondence of the council and shall keep all records and minutes of the meetings, records as to expenditures and allotment of tribal gratuitous and other funds over which the council has sole charge.

Section 4. The duties of all appointed special committees or officers of the council shall be clearly defined by resolutions of the council at the time of their creation or appointment. Such committees and officers shall report from time to time as required to the council and their activities and decisions shall be subject to review of the council.

Section 5. Regular and emergency meetings of the Crow Council shall be held on call of the chairman at Crow Agency, Crow Agency, Mont.

Section 6. No business shall be transacted unless a quorum of 100 is present.

Section 7. Order of business:

(*a*) Call to order by chairman.
(*b*) Reading of minutes of last meeting.
(*c*) Unfinished business.
(*d*) Reports.
(*e*) New business.
(*f*) Adjournment.

Section 8. It shall be the duty of the chairman of the council to duly notice all tribal meetings of the tribe for a period of at least 7 days prior to such meeting date, for decisions of the Crow Tribe affecting the sale or lease of tribal property, or of legislative matters affecting the Crow Tribe.

Section 9. The council may prescribe such salaries for officers or members of the council as it deems advisable from such funds as may be available, not to exceed $5 a day, except members authorized to go to Washington, D. C., may receive not more than $10 per day and their transportation each way by train, air, or car.

ARTICLE II. RATIFICATION OF CONSTITUTION AND BYLAWS

This constitution and the attached bylaws, when adopted by a majority of those attending district councils called to vote on accepting a constitution and bylaws shall be binding upon the Crow Tribe.

CERTIFICATE OF ADOPTION

Pursuant to the constitutional election held on June 24, 1948, this constitution and bylaws of the Crow Tribal Council of Montana, was adopted by a vote of 295 for and 130 against in an election in which 425 votes were cast.

ROBERT YELLOWTAIL,
Chairman, Tribal Council.
GEORGE W. HOGAN, Sr.,
Secretary, Tribal Council.
L. C. LIPPERT,
Crow Agency.

APPROVAL

This constitution and bylaws, having been proposed and ratified by the members of the Crow Tribe on June 24, 1948, at a referendum, is herewith approved.

WILLIAM ZIMMERMAN, Jr.,
Assistant Commissioner.

WASHINGTON, D. C., *May 23, 1949.*

Mr. YELLOWTAIL. Thank you, Mr. Chairman.

Now then, I offer another resolution before I begin the regular discussion of the subject before us. This resolution is dated the 28th day of February, 1950 and reads as follows:

RESOLUTION

Whereas the Crow Tribe is now conducting its tribal business by and through a tribal constitution duly adopted by the Crow Tribe through a secret and

referendum tribal vote, and which said tribal constitution has been duly acknowledged and officially approved by the Secretary of the Interior, and

Whereas any and all tribal business matters affecting the Crow Tribe shall and must clear through the Crow Tribal Council in compliance with the Crow tribal constitution before it can become and be considered an official expression of the Crow Tribe, and

Whereas any member of the Crow Tribe who circulates any petition on any Crow tribal matter and subsequently sends said petition to any Member of the Congress or the Interior Department is hereby declared null and void, and in open violation of the intent and spirit of the Crow tribal constitution, and, therefore, null and void and is misrepresenting the will of the Crow Tribe.

Done in open council on this 28th day of February, 1950.

In favor of the Resolution—Unanimous.
Against the Resolution—None.

ROBERT YELLOWTAIL,
Chairman, Crow Tribal Council.
GEORGE W. HOGAN,
Secretary of Crow Tribal Council.

Attest:

C. LIPPERT,
Superintendent of the Crow Indian Reservation.

Mr. HARRISON. I might point out to you, Mr. Yellowtail, that I do not think anybody is challenging the minutes of your tribal council. You can put that in if you want to; I do not think it is necessary unless there is objection by the committee. I do not think there is any challenge or will be any challenge of the minutes and bylaws of your tribal council.

Mr. YELLOWTAIL. I have a purpose, Mr. Chairman.

Now then, we have here a delegate with the Hardin delegation, George W. Hogan, Jr., who has done this very thing, Mr. Chairman. He circulated a wildcat petition securing the names of several of the Indians that usually do not attend the council. This Hardin delegation probably engaged this gentleman, Mr. Henry Ruegamer, not the chairman but the president of the chamber of commerce at whose place of business continued hearings of however description concerning this dam before we came here for quite some time and resulted in the coming here of a delegate which he could do if he wanted to on his own money, we have no objection, but certainly he does not represent the Crow Tribal Council in conformance with the constitution and bylaws of the Crow Tribal Council, and this resolution which was attested to by his own father as the secretary of the Crow Tribal Council as of the date shown in the resolution.

I want that in the record so it will appear when the record is printed.

Now then, these kind of acts, Mr. Chairman, these kind of acts are to be regretted. The Crow Indians on the Crow Reservation have a piece of valuable property which was left over from the great empire that they possessed in 1851 when the first original Crow Indian Reservation was agreed to by the United States as the property of the Crow Tribe.

Thirty-eight and one-half million acres was the area of the first Crow Reservation in 1851, and out of that Crow empire that extended from the mouth of the Powder River clear on to its source taking over the north half of the State of Wyoming, which the chairman of the committee here comes from, was Crow Tribal property in 1851, and it went from there up to the vicinity of Thermopolis up the Wind River to the headquarters of the Big Horn and then up to the Continental Divide which encompassed the big end of the

Yellowstone National Park, several mountain ranges containing valuable deposits of coal and other ore that have been discovered and mined and great timber reserves, the Big Horn Mountain Range was completely, all of it, in this Crow domain.

So at this date I want to point out for the benefit of the Congress of the United States that the Crows have been most liberal with their patrimony in giving to the United States of America all of their lands with the exception of what is left there now comprising of an area of a little over 2.5 million acres of land.

We have that small area of land that is left. We have been liberal, yet in our last stand up here in dividing that patrimony with any and everybody that wants to come and live among us. We have, it just so happens we have, as our last natural valuable resource this project, this site up here, upon which the Bureau of Reclaration proposes and wants to build a dam and on which the Federal Flood Control Act passed by the Congress in 1944 encompassing the entire watershed of the Missouri River area includes this proposed project in its authorization.

Now then, we come to the question, Mr. Chairman, of the request before this committee today by these gentlemen from Hardin——

Mr. HARRISON. You are talking to the committee now.

Mr. YELLOWTAIL. I am, thank you.

Mr. HARRISON. You are not talking to the gallery.

Mr. YELLOWTAIL. I expected that, Mr. Chairman. Certainly you ought to be good enough to give us a reply to statements that have been made, Mr. Chairman. I ask in all fairness that we be given permission to answer those that specifically request that the Congress does something that we do not agree with.

Mr. HARRISON. What is it you want us to do?

Mr. YELLOWTAIL. I am going to tell you right now, Mr. Chairman, if you please.

Mr. HARRISON. Proceed.

Mr. YELLOWTAIL. Mr. Bunston in his testimony this morning urged that the Congress begin action looking toward condemnation proceedings to take the lands of the Crow Tribe up here regardless of the wishes of the Crow Indians.

Mr. HARRISON. Who was this that said that?

Mr. YELLOWTAIL. Mr. Bunston, as I recall it, and another gentleman, and I don't just recall his name, he is the head of KWOK station at Billings, Mont. The request was made by several. I did not keep a pencil notation, but the record was made, and the record will reveal.

Now then, when it comes to the question of forcibly taking the tribal treaty lands of the Crow Indian Reservation, Mr. Chairman, I think that the Crows have a valid right to object, and we hope to carry that objection on to the Supreme Court of the United States if necessary. The hearings on this Yellowtail Dam are not concluded here.

The House Appropriations Committee will hear this story; the Senate Appropriations Committee will hear this story; the Senate Public Works Committee when Senate 1964 comes before it to remove the Yellowtail Dam from the list of projects approved under the Flood Control Act will hear the story so that we have three hearings ahead of us yet upon this very question and we hope to get to the ears of most of the Members of the Congress upon this subject.

Now then, in considering this canal I wish to direct my attention primarily to the canal on the west side of the Big Horn River. I talked with Mr. Robert F. Herdman of the Bureau of Reclamation, chief engineer, who was stationed at Hardin until recently when he was transferred to Lebanon to conduct other Bureau investigations of engineering projects.

When I sat down with Mr. Herdman, not once but several times, on this occasion I have here Mr. Herdman's notations in his own handwriting in pencil. I asked Mr. Herdman if he would not sign that, and he said no, but he said, "Here are the figures." I want to quote. I want to show that the Bureau of Reclamation has shifted its figures not once but several times here in giving to the public the acreages involved, the money involved, and so forth.

Now under this pencil notation by Mr. Robert Herdman, chief engineer, he marked here in his own pencil notation, "New lands." In considering the acreage involved and the cost in putting water on the west side of the Big Horn River in the proposed Highland Canal. Mr. Herdman's figures there in his own handwriting shows 44,000 acres. He said first 40,000 acres and then consulting Carl Sloan and Mrs. Roger who was sitting there as his secretary he came away from the desk and said 44,000 acres, and his figure of 40,000 acres is still there.

West Canal, 40,000 acres, money allotted, $11,450,000. I said, "Mr. Herdman, will you please sign your name to those figures?"

He said, "No; that I can't do because I am just the chief engineer, and I am going to build this canal if the dam is authorized."

Well, under those figures of Mr. Herdman I place it No. 1 because I have the other set of figures. Forty thousand acres divided into $11,450,000, the amount that Mr. Herdman then said was allotted, amounts to $286,000.25 per acre construction costs.

Now then, Mr. Chairman and gentlemen of the committee, here are some facts relating to the Hardin unit up here. The canal (1) is 45 miles long instead of 70 as stated this morning; (2) number of landowners 182 according to a count on the map as made by the Bureau of Reclamation when they were at Hardin—182 people; (3) the amount allotted for construction under Mr. Herdman's plan, under Mr. Herdman's figures, $11,450,000.

I am coming to the higher figure. (4) The amount of land under this proposed project to be served is 40,000 acres according to Mr. Herdman. (5) The per acre construction cost, as was said a while ago, is $286.25. (6) I would like to have this get to the Congress. The individual money benefits from the $11,450,000 divided between 182 people amounts to $68,857-plus.

Now as I said a while ago, these figures are derived from the figures given to me on paper by Mr. Herdman. Now then, the Reclamation Bureau comes up in its statement that these figures are not quite correct. The real amount allotted for construction is $11,500,000.

(*b*) Acreage to be served is 45,000 part of it on the west and 5,000 acres or so on the east.

(*c*) The per acre construction cost under these figures up here, under these Bureau of Reclamation figures, would be $255 and five-ninths of a cent. We heard this morning up there when the Bureau of Reclamation agents testified that that figure was reduced down

to two hundred forty dollars and some-odd-cents. We have been unable to keep up with them, but these figures are now too old so we are presenting the figures we have here subject to correction if the Bureau of Reclamation figures are stationary.

Now then, under the No. 1 plan, Mr. Herdman's figures, every 40-acre tract under this proposed Yellowtail irrigation canal up there, which I designate as plan number one, every 40-acre tract represents a construction cost of $11,450. Under the No. 2 plan which is the Bureau of Reclamation figures every 40-acre tract represents a construction cost of $10,220.

Now, then, on the operation and maintenance charges, present operation and maintenance charges, current operation and maintenance charges under the ditch on the Big Horn Valley is $2.35 per acre.

Two, under the Willow Creek storage which is on the upper Lodge Grass Creek and serves the Lodge Grass Creek about 7 miles to its confluence with the Little Big Horn River and then on down to the Hardin area is $2.35.

Now, then, under the increased cost today, after 14 years practically of the figures that we have been citing, we have had all kinds of increases in the cost of materials. John L. Lewis, as you all know, has called strike after strike after strike. The price of steel has gone up, everything that goes into a dam has gone up, so that we know without going to some auditor up there and asking for figures, we know, and we are sure when we say to this committee, that the cost, the increase in cost since the time that the Bureau, the Federal Power Commission made its report is easily around 30 percent. So that the figures presented as of 1949 in the Federal Power Commission report contained in this in which Congressman D'Ewart this morning inserted into the record, cannot be considered as reflecting the costs as of today. We must add, Congressman D'Ewart, around 30 percent increase in the costs as against the estimates arrived at way back 14 years ago.

So that on the construction, on the operation and maintenance charges, on the new ditch, if and when built, we must be prepared, and I think the figure is within reason to say that we are going to pay somewhere between $2.50 to $3 per acre operation and maintenance charges. At $3 that means $120 for every 40-acre tract.

Now, then, I want to take up the question that we have been hard to deal with; that the Crows have been adamant and hard to deal with. I know that question is directed at me personally by nearly everybody that makes the statement because I am the chairman of the Crow Tribal Council, and I have been chairman of the Crow Tribal Council since shortly after 1944 when I resigned as superintendent of the Crow Indian Reservation.

Perhaps I may have stated here to begin with, you gentlemen probably do not know, that I was superintendent of the Crow Indian Reservation all through the Franklin D. Roosevelt administration and part of the Truman administration. I resigned from the Indian Service in 1944. Since that time, and most of that time shortly thereafter, I was made chairman not because I wanted to but because the Crow Indians selected me and drafted me practically, and I have served as their chairman and am still serving as their chairman.

Now, then, upon the question that the Crow Indians have been unwilling, I want to state here for the record, that that is not true.

On February 18, 1949, I wrote this letter in the presence of Mr. Robert F. Herdman, the chief engineer of the Bureau of Reclamation stationed at Hardin, Mont., and in the presence of Carl S. Sloan, a field representative of the Bureau of Reclamation attached to the office of the Bureau of Reclamation which was stationed at Hardin at that time, 1 of the officers and within the hearing distance of Frances Rogers, who used to be my cash clerk at the Crow Agency and who at that time was Mr. Herdman's private secretary, so that I have 3 witnesses, 2 that will probably testify that they knew that I wrote this in their presence up here, which tried to deal with Mr. Herdman but Mr. K. F. Vernon, who then was the regional director of the Reclamation Bureau at Billings, Mont.

I wish to offer this for the record after I read it. This is written at Hardin, Mont., but I dated it at Lodge Grass so that the reply would come back to me at Lodge Grass. The letter reads as follows:

LODGE GRASS, MONT., *February 18, 1949.*

Mr. K. F. VERNON,
Director, Region VI, Bureau of Reclamation, Billings, Mont.

DEAR MR. VERNON: The Crow Tribal Council on December 22, 1948 passed and executed a resolution contracting for the services of Mr. Berry Dibble as an engineering consultant for the tribe in connection with the proposed hydroelectric development on the Crow Reservation. This resolution has been forwarded to the Commissioner of Indian Affairs in Washington and his reaction is clearly set forth in the attached copy of a telegram to our legal counsel, Mr. R. L. R. Simmons.

I do not happen to have that telegram because Mr. Simmons died not too long after that and his papers and so forth are in the possession of his wife somewhere. So that telegram I cannot introduce for the record here.

Mr. Dibble will no doubt desire to review all of the technical details with respect to the proposed Yellowtail development in order to be able to properly advise the tribe.

It is now the wish of the tribe that the Bureau of Reclamation designate a representative to work with Mr. Dibble in order that a conclusion can be reached and that we may proceed as rapidly as possible toward—

Now get this:

an amicable agreement based on "just compensation" for the tribal interests in the project.

There have been a vast number of rumors as to the Crows' attitude towards the development and I can assure you most of them are rumors tainted with the gossip flavor. We are uninitiated in the matters of engineering developments and therefore good business dictates this course for us. If we can begin work immediately after Mr. Dibble gets on the job and can find a reasonable basis for an amicable agreement based on "just compensation" we will take off our coats and go down the line with your Department whenever and wherever necessary on behalf of the project.

It is the desire of the tribe to secure an appraisal of the situation at the earliest possible date in order that the project may go ahead. An expeditious decision in this matter will be appreciated.

Respectfully,

ROBERT S. YELLOWTAIL,
Chairman, Crow Tribal Council.

cc: R. F. Herdman, Construction Engineer, Hardin, Mont.
D. C. Ketcham, Yellowstone District.

Mr. Chairman, with your permission I offer this for the record.

Mr. HARRISON. Any objection? It will be received.

(The letter referred to follows:)

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It is the desire of the tribe to secure an appraisal of the situation at the earliest possible date in order that the project may go ahead. An expeditious decision in this matter will be appreciated.

Respectfully,

ROBERT S. YELLOWTAIL,
Chairman, Crow Tribal Council.

Mr. YELLOWTAIL. I think that letter will refute any statement that we have been unwilling to deal. We have that to indicate that we are not hard to deal with. Here is the answer. I offer this for the record at this point after I have read it to the committee. It reads as follows:

UNITED STATES DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
Billings, Mont., February 28, 1949.

Reply attention:
Mr. ROBERT S. YELLOWTAIL,
Chairman, Crow Tribal Council,
Lodge Grass, Mont.

Dear Mr. YELLOWTAIL: Thank you for your letter of February 18, 1949, informing me respecting the contracting by the Crow Tribe for the employment of Mr. Berry Dibble as an engineering consultant in connection with the determination of the value of the tribal lands required by the United States for the construction of the Yellowtail Dam, a feature of the Hardin Unit of the Missouri River Basin project.

As you know, more than a year ago—January 9, 1948—an offer was made by the officials of the Bureau of Reclamation in a meeting with the Crow Tribe at Crow Agency, Mont., to negotiate with the tribe an agreement whereby the United States, acting through the Bureau of Reclamation, would be permitted to trespass upon tribal lands during the preconstruction and construction periods in connection with the development of the Hardin Unit of the Missouri River Basin project, particularly the Yellowtail Dam, and for a valuation and appraisal of the tribal lands by a board of appraisal of 3 members, 1 to represent the Bureau of Reclamation, 1 to represent the Crow Tribe, and 1 to be a third party mutually satisfactory to the Crow Tribe and to the Bureau of Reclamation. Such appraisal and valuation was to be based upon the commercial value of the land for the most profitable purpose for which available, including the development of power. Additionally, an interim payment of $1,000 per month was to be

made to the Crow Tribe. The Bureau's offer to execute such an agreement was not accepted, and, of course, no such agreement as was contemplated was made.

I want the committee to get this because I am going to comment on this after I get through with another prepared statement.

In the circumstances, it was necessary for the Bureau of Reclamation to file with the Office of Indian Affairs, through official channels, an application for the tribal lands and the interests in tribal lands required for the Yellowtail Dam and for recreational areas to be developed in connection with the dam and reservoir, and an application for the tribal and allotted lands and the interests in such lands required for the Yellowtail Reservoir, campsite, and recreational areas. These applications were filed pursuant to the act of Congress of February 5, 1948 (Public Law 407, 80th Cong., 2d sess.), and section 1, article VIII, of the act of Congress of April 27, 1904 (33 Stat. 359). Since 1914, the lands described in these applications have been in withdrawal under the act of June 25, 1910 (36 Stat. 858). While I am not officially informed as to the processing of these applications, I understand that after they have been considered by the Bureau of Reclamation and the Office of Indian Affairs in Washington, the Secretary of the Interior will advise the Crow allottees and the Crow Tribal Council of his proposed findings and decision, thus giving to the Crow Tribe and the Crow allottees the opportunity to be heard as to the Secretary's proposed findings and decision. What final action will be taken by the Secretary, I assume, will depend upon the showing made by the Crow Tribe and the Crow allottees in the hearing before the Secretary.

In view of the official action that had to be taken by the Bureau of Reclamation pursuant to the governing acts of Congress and the regulations thereunder because of the failure of the negotiations for an agreement along the lines discussed in the January 9, 1948, meeting with the Crow Tribe at Crow Agency, Mont., I do not feel that I have the authority to designate a representative of the Bureau of Reclamation to work with Mr. Dibble in valuating and appraising the lands.

Very truly yours,

K. F. VERNON,
Regional Director.

(Carbon copies to Mr. Allan G. Harper, Assistant Regional Director, Office of Indian Affairs, Billings, Mont., Regional Counsel, Regional Land Officer (with copies incoming letters, and enclosures to each) District Manager, Billings, Mont., Construction Engineer, Hardin, Mont.)

A copy of this apparently went to Mr. Herdman. I would like to offer, if the chairman does not object, an exact copy of this so that when we go before the Appropriations Committees of Congress on both sides and before the Public Works Committee we will have the original of this letter to offer in evidence.

Mr. HARRISON. What is the will of the committee? There will be no objection if you bring in a certified copy.

Mr. YELLOWTAIL. I have one right here.

Mr. HARRISON. A certified copy or else use that.

Mr. YELLOWTAIL. Yes, sir.

Mr. YELLOWTAIL. Now then, Mr. Chairman, I want to make this plain. I feel that probably my remarks are not taken with too much graciousness here, but I am representing the Crow Tribe. The Crow Tribe of Indians up here as I pointed out to begin with owns this last property, and our backs are against the wall in a sense. We are here to defend our rights both vested, political, legal, as well as otherwise under the Constitution of the United States, and in trying to do that it makes it necessary to present the evidence that to us is important.

Now, then, we have had a recent decision here that has just been placed in the record by Mr. Kronmiller, the tribal attorney, which was dated February 3, 1954, and I have here a reply to that decision. Mr.

Chairman, Mr. D'Ewart, Mr. Budge, and the other Congressmen present, I wish to insert this into the record after I read it here at this point in my remarks. It may be of some curiosity to you folks to see what an Indian reply to the Solicitor's opinion in the Interior Department sounds like, looks like, and what it amounts to.

Reply to Solicitor Davis' opinion by Robert Yellowtail, Crow Indian Tribe, Condemnation Indian Tribal Lands, Yellowtail Project.

Condemnation proceedings to acquire possession and title to the tribal lands of the Crow Tribe by the United States is urged, in an opinion on February 3, 1954, by the new Interior Department Solicitor, Clarence A. Davis.

On March 28, 1949, and again on October 27, 1952, two separate opinions were handed to the Secretary of the Interior by the then Interior Department Solicitor, Mastin G. White. Their opinions were numbered and initialed as follows:

The March 28, 1949, opinion—M–35093—by Mastin G. White

The October 27, 1953, opinion—M–36148, No. 30247—by Mastin G. White.

The February 3, 1954, opinion—M–36148 (Supplemental) No. 55482. Clarence A. Davis—

present Solicitor of the Department of Interior.

These opinions are conflicting. The first two opinions by Mastin G. White, Solicitor under the Truman administration, holds that section 8 of the act of June 4, 1920 (41 Stat. 751, 753) as amended by the act of May 26, 1926 (44 Stat. 658–660). Also, by the act of June 28, 1946 (60 Stat. 333, 336) which provides in part as follows:

This is quoting from the opinion of Mastin White.

"No further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe, (2) the irrigation district or districts affected, and (3) the Congress of the United States. The consent of the Crow Tribe shall be obtained by a majority vote of the General Council of the Crow Tribe expressed at a duly convened meeting."

That was done, gentlemen. The Crow Tribe in a duly convened meeting, not once and one meeting, practically conducted by Mr. Vernon of the Bureau of Reclamation when he was in charge thereof and Mr. Lippert got a very straight pointed opinion from the Crow Tribal Council.

Solicitor White further pointed out that:

It will be noted that the prohibitions contained in these statutes are sufficiently broad in scope to cover the construction of the proposed Yellowtail project. The prohibition in the 1920 act, as amended by the 1926 act, to also cover the construction of any additional irrigation system for the irrigation of Indian lands on the Crow Indian Reservation (approximately 49 percent of the lands to be served by the Yellowtail project would be "Indian lands on the Crow Reservation"; and the prohibition in the 1946 act is upon * * * "further construction work on the Crow Indian Reservation—by the United States."

Solicitor White further declared:

* * * The 1946 prohibition upon further construction work on the Crow Indian Reservation by the United States without the consent of the Indians was adopted by the Congress subsequent to the approval by Congress, in section 9 of the Flood Control Act of December 22, 1944 (58 Stat. 887, 891) of the plans of development for the Missouri River Basin that included the Yellowtail project. That section approved, among other things, the plans contained in Senate Document 191, 78th Congress, which included the Yellowtail project. Therefore, it seems clear that the approval of the plan for the Yellowtail project was thereafter qualified by and made subject to the prohibition contained in section 9 of the 1946 act.

Also, * * * Moreover, section 9 (c) of the Flood Control Act of 1944 expressly provides that "irrigation of Indian trust and tribal lands shall be in accordance with the laws relating to Indian lands." Among these laws are, of course, the provisions of section 8 of the 1920 act, as amended in 1926, and

of section 9 of the 1946 act, prohibiting further irrigation developments on the Crow Indian Reservation without the consent of the Crow Indians.

Also:

In its essence, a condemnation proceeding involves the taking of land against the will of the owner, or irrespective of the owner's consent, since any further irrigation developments on the Crow Indian Reservation are contingent, under present law, upon securing the consent of the Crow Indians, it is my opinion that the tribal lands needed for the Yellowtail Dam and Reservoir site cannot be acquired by means of condemnation proceedings.

That is the end of the quotation from Mastin White.

THE NEW OPINION

In the new and recent opinion of the new Solicitor of the Interior Department, Clarence A. Davis, he contends that in his opinion—

there is authority in the Department to proceed with the construction of Yellowtail Dam and to bring such condemnation actions as may be necessary under the provisions of the existing reclamation laws to acquire possession and title thereto.

The burden of the new Solicitor Davis' argument is that—

Section 9 of the act of June 28, 1946 (60 Stat. 333, 336) which prohibits * * * "further construction work on the Crow Reservation without the consent of the Crow Tribe and the irrigation districts affected" applies only to the extension of an irrigation system of the Crow reservation and is not applicable to construction of the Yellowtail Dam.

Also, present Solicitor Davis contends that—

The Congress has specifically authorized the Yellowtail Dam as a reclamation and power development and has provided that in undertaking the project and carrying out his plans, the Secretary shall be governed by the Federal reclamation law (Flood Control Act of 1944, 58 Stat. 887). Section 7 of the Organic Reclamation Act of June 17, 1902 (32 Stat. 338) gives the Secretary of the Interior express authority to condemn lands needed for a reclamation project.

We thus have before us 2 conflicting opinions by 2 Solicitors of the Department of the Interior, 1, Mr. White serving under the Truman administration, and the other, Mr. Davis, serving under the Eisenhower administration, with both advising their respective Interior Secretaries as to what in their judgment the law is, with respect to the same legal question: Will the United States take away from the Crow Tribe of Indians of Montana, their tribal treaty lands for the Bureau of Reclamation's proposed Yellowtail multiple-purpose dam on the Big Horn River in the heart of the Crow Indian Reservation?

This, gentlemen of the committee of the Congress, is the question raised by the present Solicitor of the Department of the Interior.

The former Solicitor, Mastin G. White, after reviewing all of the many suggestions of applicable laws, acts of the Congress, and statutes by the Bureau of Reclamation's lawyers in Washington and at Billings, Mont., said "No." Also, he said that

* * * Section 9 of the act of June 28, 1946 (60 Stat. 333, 336), and also section 9 (c) of the Flood Control Act of December 22, 1944 (58 Stat. 887, 891), prevented the Congress or the court from taking such action against the Crows and also acts as a legal and moral barrier thereto.

The present Solicitor, Mr. Davis, who has had barely enough time to get his feet on the ground, ruled on February 3, 1953, that Congress and the courts have ample authority to do the things former Solicitor White, after exhaustive research, denied authority in the proponents,

to take the tribal treaty lands of the Crows by force and compulsion or condemnation. The proper and natural question now before us all is: Which of the two Solicitors is right and which is wrong?

Certainly this fact remains true. The present Solicitor, in denying that all existing laws cited by his predecessor, Mastin G. White, cannot be considered as speaking for the Congress, nor the Attorney General, nor the United States Supreme Court, nor for the Government as a whole, but is simply advising his superior officer, the Secretary of the Interior, what, in his judgment, is the law upon the question of the possible condemnation of the tribal and treaty lands of the Crow Tribe needed for the Reclamation Bureau's proposed Yellowtail Dam; this, it appears to us, is all that Solicitor Davis' opinion amounts to. Naturally, his own adverse conclusions of all existing law previously cited by Mastin G. White, former Solicitor, to sustain his own position of "no authority of law reposed in the Secretary to condemn the tribal treaty lands of the Crows," seems most erroneous and absolutely wrong. However, be that as it is, the Congress still remains the umpire of all disputes between the proponents and opponents of the Bureau of Reclamation's proposed multiple-purpose dam on the Crow Indian Reservation. No matter which side wins or loses, Congress will determine for itself the propriety of the proposed raid upon the United States Treasury to build this highly expensive dam proposed by the Reclamation Bureau.

Let us now consider the contention of Solicitor Davis, that section 9 of the act of June 28, 1946 (60 Stat. 333, 336), which prohibits "further construction work on the Crow Reservation without the consent of the Crow Tribe and the irrigation districts affected" applies only to the extension of an existing irrigation system on the Crow Reservation and is not applicable to the construction of the Yellowtail Dam."

What are the facts? Here they are from the official records of the Indian Bureau.

The Crow irrigation project was authorized by the act of March 3, 1891. This project comprises 11 separate units constructed by the Government with Crow tribal money, namely: The Agency, Reno, Forty Mile and Upper Little Horn No. 2, the diversions of which are from the Little Big Horn River; Lodge Grass No. 1 and Lodge Grass No. 2, the diversion of which are from Lodge Grass Creek; Soap Creek, diversion of which is from Soap Creek; the Big Horn, diversion of which is from the Big Horn River; Lost Creek, the diversion of which is Lost Creek; and Pryor and Coburn, the diversions of which are from Pryor Creek; the Government also acquired water from the Two Leggins Land & Improvement Co., predecessors of the Two Leggins Water Users Association, for the irrigation of 5,642.46 acres of Indian lands under the Two Leggins unit, a white-owned company irrigating white lands off the Crow Reservation, and also, water from the Bozeman Trial Ditch Co. for 1,961.34 acres of Indian-owned lands under the company ditch unit.

Here is the significant fact apparently unknown to Solicitor Davis when he rendered his opinion. All of these 11 Crow Reservation project units were completed as follows:

1. The Agency, Pryor, and Lost Creek units were completed in 1895.
2. The Soap Creek unit in 1894(3). Lodge Grass No. 1 and Forty Mile units in 1896.

4. The Big Horn unit in 1905.
5. Lodge Grass No. 2 in 1924.
6. Two Leggins unit of the Crow Reservation laterals in 1910.
7. Upper Little Horn Ditch No. 2 in 1914.
8. The Reno unit in 1885.
9. The Willow Creek Dam in 1942. This supplies water for the Lodge Grass Creek units and for the Reno and Agency units.

Thus, with these facts before us, the Congress can appreciate the factual error of Solicitor Davis when he makes the earnest argument that—

> Section 9 of the act of June 28, 1946 (60 Stat. 333,336) which prohibits "further construction work on the Crow Reservation without the consent of the Crow Tribe and the irrigation districts affected" applies and refers only to the extension of an existing irrigation system on the Crow Reservation and is not applicable to the construction of the Yellowtail Dam.

On the contrary, as is indicated in the foregoing, all of the units under the Crow Irrigation projects had been completed many years before the act of June 28, 1946, the Lodge Grass No. 2 unit being the last which was completed in 1924. Hence, the words, "no further construction work on the Crow Indian Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe," etc., used in section 9 of the act of June 28, 1946 (60 Stat. 333, 336), refers exactly to any and all future irrigation construction schemes such as the Yellowtail Dam and any other projects that may yet be conjured up by the Bureau of Reclamation or any agency of the United States.

Solicitor Davis was totally wrong in his advice and opinion to the Secretary of the Interior. This statement of fact and of error, the legal declaration of Solicitor Davis, ipso facto removes the argument he leans upon to dispute the opinions of former Solicitor Mastin G. White, who held that section 8 of the Crow Act of June 4, 1920, with its several amendments plus section 9 (c) of the Flood Control Act operates and acts as a bar to the proposed condemnation of the tribal lands of the Crow tribe, needed for the construction of the Bureau's proposed Yellowtail Dam.

Now, let us proceed to the latter half of Solicitor Davis' opinion. He states, in substance, that the Secretary of the Interior has authority under the Flood Control Act of 1944, section 9 (c) thereof (58 Stat. 887), and section 7 of the Reclamation Act of June 17, 1902 (32 Stat. 338) to proceed against the Crows under the power and force of Government to condemn their tribal treaty lands and acquire possession and title thereto. It is apparent that the opinion of Mastin G. White as set forth in the last two paragraphs of his opinion of October 27, 1954. M–36148–30247 quotes existing law correctly and should prevail.

GENERAL ARGUMENT—CROW LANDS

The Crow Tribe of Indians held lands including its present reservation from time immemorial. The first Crow Treaty, that of Mandan Village in 1825 was a treaty of friendship. The second treaty of September 17, 1851, defined the Crow lands which very briefly covered the Yellowstone River drainage beginning at the mouth of Powder River to its source, thence up the Big Wind River to its source on the

Rocky Mountain divide, thence along the continental divide to north of Livingston, then northeasterly to the Fort Peck Dam area, then southeast along the Big Dry to the point of beginning. This area contained 38½ million acres. A second Fort Laramie Treaty, 1868, reduced the area to 9 million acres and other treaty reductions have reduced this area to the present 2½ million acres plus now left as the final home stand of the Crow Tribe.

ORIGINAL INDIAN TITLE

In *Scheem* v. *United States*, 273 Fed. 93, the ninth circuit court held, page 95:

> The grant was not a grant to the Indians but was a grant from the Indians to the United States, and such being the case, all rights not specifically granted were reserved to the Indians.

In December 1941, the Supreme Court decided: *United States* v. *Santa Fe Pacific R. R. Co.*, 314 U. S. 339 86 L. ed. 260, that a Federal railroad grant passed title to lands in Arizona subject to Indian rights of occupancy. The Court said, pages 269 and 270:

> Occupancy, necessary to establish aboriginal possession is a question of fact to be determined as any other question of fact. If it were established as a fact that the lands in question were, or were included in, the ancestral home of the Walapais in the sense that they constituted definable territory occupied exclusively by the Walopais (as distinguished from lands wandered over by many tribes) then the Walopais had "Indian title" which unless extinguished, survived the railroad grant of 1866.
>
> Nor is it true, as respondent urges, that a tribal claim to any particular lands must be based upon a treaty, statute, or other formal Government action.

In *United States* v. *Alcea Bond*, decided No. 1946, 329 11. S. 40, 91 L. ed. 29, the Court passed on questions of original Indian title in a suit brought under the act of August 26, 1935 (498 Stat. 801), conferring jurisdiction upon the Court of Claims to entertain legal and equitable claims arising under or growing out of occupancy, this original Indian title, the Court said, page 35:

> It has long been held that by virtue of discovery the title to lands occupied by Indian tribes vested in the sovereign this title was deemed subject to a right of occupancy in favor of Indian tribes, because of their original and previous possession, it is with the consent of this right of occupancy, this original Indian title, that we are concerned here.

And on page 39:

> Respondents have satisfactorily proved their claim of original Indian title and an involuntary taking, though they are entitled to compensation under the Jurisdictional Act of 1935. The power of Congress over Indian affairs may be of a plenary nature; but it is not absolute. It is subject to constitutional limitations. It does not enable the United States to give the tribal lands to others or to appropriate them to its own purposes without rendering, or assuming an obligation to render just compensation for them.

From these decisions we can properly deduce that original Indian title legally vests when such titles are confirmed by treaty or otherwise. Now, back to the opinion of Solicitor Davis, paragraph (a). The Solicitor states:

> The Yellowtail Dam and Reservoir was specifically authorized and approved by the Congress as a part of the Flood Control Act of 1944.

He should have added that section 9 (c) specifically provides:

> except that irrigation of Indian trust and tribal lands, and repayment therefor, shall be in accordance with the laws relating to Indian lands.

Thus, section 8 of the act of June 4, 1920 (41 stat. 751, 753) as amended by the act of May 26, 1926 (44 Stat. 658, 660) and by section 9 of the act of June 28, 1946 (60 Stat. 333, 336) providing for no further construction work by the United States unless and until the Crow Tribe approves, are the laws relating to Indian lands in this instance and should from all points of reasoning, be controlling and the Crows respectfully submit that they do.

CONCLUSION

It appears unnecessary to pursue this argument further in view of the facts of error herein stated, which in effect, pulls the rug out from under the Solicitor, whose principle argument, that section 9 of the act of June 28, 1946, etc. refers to, and applies only to the extensions of an existing irrigation system on the Crow Reservation, has no meaning whatsoever, as is herein pointed out.

The attention of the Congress is also pointed to this salient fact. There can be no extensions of the present irrigation units or projects on the Crow Indian Reservation, as the present irrigation canals have been built to a point where there are no more lands to be served. They are and were completed and no extensions thereto, as contended by Solicitor Davis, are at all possible.

This fact again pulls the rug out from under Solicitor Davis, and makes his principal argument foolish and of absolutely no meaning. It also points out that he was ill-advised, the Secretary was ill-advised, by his assistants as to the actual facts as they exist with respect to the completed irrigation units on the Crow Indian Reservation.

Also the Congress is respectfully advised that the act of June 28, 1946 and section 9 thereof (60 Stat. 333, 336) is a contract between the United States and the Crow Tribe, whereby each party for valuable consideration, agreed to do certain things within certain specified dates and time set forth in the agreements, which was 2 years from the date of the passage of the act, and which each party has faithfully observed and the contract has been since, and is now, operating as agreed to and further binds each party thereto, to a continued performance of any and all agreements therein set forth unless and until by mutual consent the law and agreement is changed. This has not happened yet. But for the Congress to agree to carry out the views of Solicitor Clarence A. Davis which amounts to a repudiation, would be the impairment of a contract which is illegal, unconstitutional, and a repudiation of all past declarations of solicitude, fair and honorable dealings with the Indian people. We respectfully submit these undeniable truths for the serious attention and consideration of the Congress or the courts.

Mr. D'EWART. May I ask a question?

Mr. YELLOWTAIL. All right.

Mr. D'EWART. What you have to say applies also to the construction of transmission lines?

Mr. YELLOWTAIL. I did not get your last statement.

Mr. D'EWART. Does what you just said apply also to the construction of transmission lines?

Mr. YELLOWTAIL. Naturally it would so far as the Yellowtail Dam is concerned, Mr. D'Ewart.

Mr. D'EWART. Have you ever examined the Solicitor's opinion of September 10, 1952, signed by W. M. Flanery?

Mr. YELLOWTAIL. No; I haven't. I have not, but there is a special act on the question of transmission lines upon Indian reservations.

Mr. D'EWART. That Solicitor's opinion finds it proper for the transmission lines to cross Crow land, and then it says in conclusion:

It is, thus, my conclusions that there is no legal obstacle to the grant of the requested right-of-way without the consent of the Crow Tribe. The question whether the grant should be made without tribal consent is one for administrative determination.

Mr. YELLOWTAIL. May I make this statement following yours, Mr. Chairman?

Mr. D'EWART. First, Mr. Chairman, I would like to make the whole Solicitor's opinion of September 10, 1952, filed in the record at this point.

Mr. HARRISON. Without objection, so ordered.

(The document referred to follows:)

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SOLICITOR,
Washington, D. C., September 10, 1952.

MEMORANDUM

To: Secretary of the Interior.
From: Acting Solicitor.
Subject: Right-of-way for transmission line across Crow tribal lands to Yellowtail Dam site.

The Bureau of Reclamation proposes that the Department approve, in connection with the construction of a transmission line from Lovell, Wyo., to the Yellowtail Dam site, a grant of a right-of-way across tribal lands of the Crow Indian Reservation, although the Crow Tribe refuses to consent to the grant, and section 3 of the regulations approved on August 10, 1951 (25 C. F. R. 1951 supp., pt. 256), provides that no right-of-way shall be granted across tribal lands without the prior consent of the tribal council. The Bureau of Reclamation takes the position that the consent of the tribe is not necessary under the act of February 5, 1948 (62 Stat. 17, 25 U. S. C., 1946 ed., sec. 323 et seq.), which would be the authority for the grant of the right-of-way, and recommends, therefore, that the regulation be waived, and that the right-of-way be approved.

The Bureau of Indian Affairs objects to the grant of the right-of-way on the grounds that (1) the Indians have not consented thereto; (2) the consent of the Indians is required by section 9 of the act of June 28, 1946 (60 Stat. 333, 336), and (3) there is no immediate need for the transmission line which would be constructed across the right-of-way, since the Yellowtail Dam site itself has not yet been acquired from the Crow Tribe, and such acquisition is necessary before construction of the dam may be commenced.

It is my opinion that there is ample authority under the act of February 5, 1948, to grant the right-of-way, notwithstanding the lack of Indian consent. Such consent is not necessary unless required by the act of Congress authorizing the grant of a right-of-way, and traditionally tribal consent had not been required by Congress in authorizing the grant by the Secretary of the Interior of various rights-of-way (see 25 U. S. C., 1946 ed., secs. 311–22). The 1948 act requires the consent of the tribe only if it has organized under the Indian Reorganization Act of June 18, 1934 (48 Stat. 984), on related legislation and, in view of the wide powers of Congress over the management of Indian tribal property, the necessity of securing tribal consent cannot be read into the statute by implication.

It is also my opinion that a requirement of consent to the grant of a right-of-way across Crow tribal lands cannot be deduced from the provision of section 9 of the act of June 28, 1946, supra. This act deals solely with adjustments covering the Crow irrigation project, and provides merely that no further construction work shall be undertaken by the United States on the Crow Indian Reservation without the consent of the Crow Tribe, and the irrigation districts concerned. The "construction work" referred to in this act is obviously irriga-

tion construction work, and not construction work in connection with the construction of a transmission line.

It is, thus, my conclusion, that there is no legal obstacle to the grant of the requested right-of-way without the consent of the Crow Tribe. The question whether the grant should be made without tribal consent is one for administrative determination.

W. H. FLANERY, *Acting Solicitor.*

Mr. YELLOWTAIL. Before Mr. D'Ewart's request for the inclusion of the Solicitor's opinion I wish to insert this as a part of my remarks.

Mr. D'EWART. You read it in full, did you not?

Mr. YELLOWTAIL. Yes.

Mr. D'EWART. It is all in the record.

Mr. YELLOWTAIL. That is very good.

Mr. HARRISON. Might I ask you at this time, how much more time are you going to take?

Mr. YELLOWTAIL. I can quit any time you desire, Mr. Chairman.

Mr. HARRISON. The committee will adjourn at 5 o'clock which will be an equal division of time.

Mr. YELLOWTAIL. I can conclude, although I have enough material to exceed that time. I will quit probably within the next 15 minutes if it is agreeable with the committee.

Mr. HARRISON. It is immaterial to the committee whether you consume the time or not. I wanted to call attention of the witnesses because that would make an equal division of the time, in fact a little more because the committee does not consider the testimony of witnesses for the Department as being for or against.

I think the time as it has been figured up, we try as usual to give the opponents plenty of time. You may proceed in any way you want to, but the Chair just wanted to make that statement so that the situation would be clarified.

Mr. YELLOWTAIL. I will conclude with the submission of these 2, and then give these other 2 boys a chance to make a statement.

Now then, I wish to offer for the record as a part of my remarks here the question of the justification or nonjustification of Yellowtail Dam as it appears from our angle:

An enterprise is self-supporting only when its revenues at least equal the sum of the costs properly chargeable against its revenues. It is self-supporting when its revenues are sufficient not only to cover its costs but also to afford repayment of its capital.

In considering the economic and engineering feasibility of this multiple-purpose project of many features, we realize that Congress is not equipped technically to analyze all the greatly complex problems involved; that the Congress is the umpire of all of the conflicting claims urged upon it by the proponents and opponents; that the Congress holds final judgment in all these disputes. Hence, we respectfully urge upon the Congress very careful consideration as to the value of the lands that may be ruined when placed under the proposed Hardin irrigation unit, as such has been the case of over 50 percent of all lands now under the Government's irrigation projects on the Crow Indian Reservation, and also under the Two Leggins Canal—a white-owned project off, but adjacent to, the Crow Indian Reservation. Waterlogging and alkali due to careless irrigation and seepage has ruined over half of all lands under our irrigation projects, thus wasting the people's money appropriated to build these costly projects.

Hence, again, the wisdom and economic justification of all of these projects should be a major consideration by the Congress before final approval.

Another thought urged upon the Congress is—once the Congress authorized a project, it becomes impossible to stop or eliminate future additional appropriations. We have then, a bear by the tail that we cannot let go—hence, the time to evaluate all of the implications involved in these multiple-purpose projects is before final approval by Congress, else we may bring down upon ourselves and our children an ever-mounting money burden that can ruin us.

Let us consider the irrigation features of this project. What is it that is proposed?

Answer:

1. $11½ million is to be set aside to irrigate 40,000 acres of dry farmlands now producing bountiful crops on the west side of Big Horn River and 5,000 acres on the east side.

2. This means a construction cost of $255.59 per acre.

3. This also means that every 40-acre tract under this project will carry construction assessments of $10,224.

4. This also means that under section 8, Crow Act of June 4, 1920, all of these charges are a lien against the land and must be paid in 20 years, or else foreclosure is directed.

To achieve these purposes, it is proposed (*a*) to build a mighty dam 517 feet high above bed stream and 1,430 feet long in the Big Horn River Canyon; (*b*) to build below this dam four electric pumps that will raise the water over 100 feet high and deliver water in a canal 45 miles long with a network of distributing subcanals and laterals which will irrigate forty to forty-five thousand acres of dry farming lands now producing bountiful crops of grain.

Here indeed is another one of those typical reclamation engineer's dreams. A mighty dam across the Big Horn River, from canyon wall to canyon wall, 517 feet high above streambed; 1,430 feet long at crest. To impound water which will create a lake upstream 65 miles long and which will develop 200,000 kilowatts power; hold enough water to irrigate 45,000 acres; control floods; hold upstream sedimentation; develop fish and wildlife; recreation; and supply municipal water, etc., downstream.

The cost of this amazing project will be several hundred million dollars to the people of the United States at current labor and material prices.

The area to be benefited is nearly all on the Crow Indian Reservation covering both Indian and non-Indian-owned lands. The project would directly benefit 182 owners of the lands under the proposed project. In other words, the projcet with all of the money expenditures involved would give benefits of $11,500,000 to the 182 landowners under this 45,000-acre project or a per capita benefit of $68,857.

The lands to be benefited by irrigation water at present are producing according to last summer's per acre yield record of from 20 to 60 bushels per acre at no cost to the owners except the operations, seed and harvesting costs. The per acre yield or returns based on the above figures run from $40 to $87 per acre return depending upon the market price of wheat in this area.

I want to state that I consulted Dan Maddox and Dan has been dead for several years, but the rate of yield continues about the same.

1. How much more per acre yield and return will water give this same land is one of the questions to determine the economic justification of the project?

2. Can the owners of the lands to be benefited meet and pay the reclamation costs annually and with the prescribed 20-year repayment period fixed by existing Federal law?

3. What kinds of crops besides wheat, oats, barley, and sugar beets can be grown here is another pertinent question. These are precisely the crops which have been in overproduction year after year before the Korean war broke out and for which the Government paid farmers a subsidy to not produce as they were in overabundance and were threatening destruction of the American farmers.

Then why spend several hundreds of millions of dollars of the taxpayers' money to further increase these surplus food crops, which will be surplus again as soon as the present crises is over, seems the height of economic stupidity as urged upon the Congress by the Bureau of Reclamation and supported by scared and vote-seeking politicians. It appears most pertinent to point out that it is hard to conceive or understand how the Interior Department through the Bureau of Reclamation can seriously propose such fantastic projects to the Congress.

The political implications as heretofore pointed out in connection with these projects and those that follow in the wake are tremendous and gives the political party in power a strangle-hold upon the lives and future votes of the people of the area and the hordes of federally employed workers employed at the project, who naturally will consider that their well-being, jobs, and all of their other personal conveniences are due to the party in power.

Also, we must remember that this project will be located upon a Federal treaty Indian reservation, which prohibits under pain and penalty of a stiff existing Federal law against the importation, use and possession of any kind of intoxicating liquors, including hair and hand and shaving lotions, such as bay rum and other lotions, and also lemon and vanilla extracts for the kitchen. All of these laws will be rigidly enforced against all and every person employed at the dam site headquarters for prosecution in the Montana Federal courts when this project is approved by Congress. The law and order problem due to the influx of all kinds and classes of laborers will be teriffic if and when this dam is authorized and the Government must be prepared with huge and increased appropriations to meet and properly execute its own laws as indicated for the 7 years that will be required to complete work on the dam and then thereafter as a large worker population will always be with us, including the foreign and imported Mexican seasonal beet laborers. These all mean acute law-and-order problems with consequent expensive court trials, et cetera.

In the case of this project, the costs indicate that the lands to be reclaimed will be irrigated at excessive costs, to produce crops of which we already have a surplus everywhere in the country, or which can be grown cheaper elsewhere, and it is high time that the Congress and our people scrutinize more closely these unjustifiable reclamation projects offered and urged upon the Congress by the Interior Department through its Bureau of Reclamation and supported by ambitious and power-hungry and vote-seeking politicians. These recla-

mation multiple-purpose projects in the main and all non-self-supporting and depend upon subsidies from the people's treasury and have been a source of waste of the people's money. The present national crises and defense measures will suggest that these pork barrel peacetime employment WPA projects should not be countenanced until such time as WPA projects are absolutely necessary to stave off national labor crises—another thought. It is entirely possible that in their mad desires to please their constituents, politicians may attempt to tie this project in with the current naional crises or he war effort, but any such attempt cannot distract from its economic unjustification whatsoever.

Now, as to the other features of the dam—power, flood control, and sediment control. Let us point out at the upper end of the dam in Wyoming a large irrigation scheme encompassing 872,000 acres of loose alluvial soil under presently constructed irrigation works spells ruin for the Yellowtail Dam and all of these multiple features, when this irrigation begins as it will in full force upstream in Wyoming. This dam, like the Elephant Butte Dam in New Mexico and Lake Meade in the Colorado River, will hastily fill up with silt and thus nullify all of the justification arguments that we have heard presented. This is a current reality which the Congress must understand and take into account before authorization.

Thus for all of these reasons all justifications which have been submitted and urged upon the Congress for the approval of the appropriation of the money necessary to begin construction fall flat upon the ground. They also bring forth in no uncertain fashion that Reclamation's proposed Yellowtail multiple-purpose project is without economic justification and should be discarded indefinitely and not authorized by the Congress.

Now for the last item here. I have a letter from the State of Wyoming, from the State engineer's officer, Cheyenne, Wyo., May 19, 1951, which I would like to read and insert in the record.

Mr. ROBERT YELLOWTAIL,
President, Crow Tribal Council,
Lodge Grass, Mont.

DEAR MR. YELLOWTAIL: I am in receipt of your letter om May 3, 1951, in reference to the total amount of water reserved for irrigation from the Big Horn River in Wyoming, and the total acreage involved in irrigation projects.

The report of the engineering committee of the Yellowstone River Compact Commission as submitted to the commission on January 31, 1950, and the addendum thereto contains what I think is the latest and best information on present irrigated acreage and potential development. This information as taken from this report is as follows:

The present irrigated acreage in Wyoming from the Big Horn River and tributaries including 87,734 acres of land irrigated by Bureau of Indian Affairs projects is 570,893 acres.

The average in potential and possible projects in Wyoming from the Big Horn River and tributaries is 253,250 acres.

The net annual consumptive use based on an estimate of 1.65 acre-feet per acre is 941,973 acre-feet for the present irrigated lands and 417,863 acre-feet for the potential and possible projects or a total future consumptive use of 1,359,836 acre-feet annually. The actual water diversion for this acreage would be probably between there and 4 acre-feet per acre, but much of this would be taken care of by use and reuse of the return flows.

The Yellowstone River compact as recently agreed upon by the States of Montana, North Dakota, and Wyoming and now before the Congress for approval divided the unused and unappropriated waters of the Big Horn River (exclusive

of the Little Big Horn River) on a basis of 80 percent to Wyoming and 20 percent to Montana.

I believe this will furnish you the figures you wish relative to this matter.

Sincerely yours,

L. C. BISHOP, *State Engineer.*

Now, in conclusion, I want to stop here, so that we can give these boys a chance up here.

The question was asked by the lady Congressman sitting here: "What will the loose alluvial soil that will drift into the dam do to the dam if and when the dam is built?"

I want to say to this committee that I know practically every acre of this ground, from the Shoshone Indian Reservation, from the beginning of the Big Horn River, down to its source. In Wyoming, on the original ceded Crow Indian Reservation, we have a vast area of very loose alluvial soil—on both sides of the river—going halfway up the Big Horn Mountains on the east, and going clear to the Rocky Mountains in the Shoshone National Forest.

When this tremendous irrigation is indulged in to the fullest limit in Wyoming, we are going to have a real silt problem in the Yellowtail Dam if and when built. At Lake Mead, N. Mex., we had to build additional additions to the top of the dam to keep the sedimentation from ruining the dam. And Senator Tobey delivered a speech in the United States Senate pointing out that Lake Mead in Colorado likewise was filling up, and pointing out that the Congress should be careful in appropriating the millions of dollars of the people's money in building these kinds of constructions.

It isn't because we have shut our eyes and are totally adamant to the question of agreeing to construction. I introduced a letter and read it to you, where we wanted to sit down with the Bureau of Reclamation, when Mr. Vernon was director, not very long ago, and said, "Come on. We will sit down up here and see if we can't work out something that will be agreeable to the Crow Tribe and the Bureau of Reclamation in general."

And he said, "No." He said, "I have referred the matter to higher authorities in Washington, that handle Indian affairs, and you can go and talk to the Secretary when he gets ready for you." Condemnation followed.

Masten White says, "Absolutely not. You can't do it."

Another attorney comes along and says, "Go ahead. You can do it."

Under One Hundred and Eighty-seven United States Reports in the famous Lone Wolf decision, there was pointed out what the Congress had said in dividing the lands of the Confederated Tribes of Comanches, Kiowas, and Apaches up there, where they alleged, through the interpreter and the Government's commissioners, injury by not following the agreements with the Indians.

The Supreme Court said to Chief Lone Wolf in sum and substance, "If injury was occasioned, which we do not wish to be understood as implying"—the Supreme Court dodged the issue, and said, "We do not wish to be understood as implying that"—relief must be sought by an appeal back to that body and not the courts.

So I want to point out that as to the Indian tribes of the United States, so far as their tribal lands are concerned, it is necessary that we appropriate our own moneys, and come here in opposition to the

white population and others on Indian reservations surrounding our homes who, in actions similar to the kind that we see here today sponsored by the Billings Chamber of Commerce and the Hardin Chamber of Commerce, drag along a great horde of people from those localities to come and ask the Congress for condemnation of Indian lands.

Take it, and we will talk to them afterwards.

We are going to object in our feeble and humble way, Mr. Chairman, through the committees of Congress, where we have a lot of friends. We have a lot of friends on the other side of the Congress in the United States Senate that will never permit a thing of this kind to pass the Congress, and we have a lot of friends in the House of Representatives, of which you are a Member, that will never allow condemnation of Indian lands in opposition to the will of the Indians, who have given everything up, from the Atlantic to the Pacific coast and from Canada to Mexico, to go through and be taken by the power and force of the Government. I would like to file in the record a telegram I just received from the Montana Intertribal Policy Board, supporting my statements.

HELENA, MONT., *May 1, 1954.*

ROBERT YELLOWTAIL,
Care Congressman Lee Metcalf,
House of Representatives, Washington, D. C.

The Montana intertribal policy board for our seven reservations support the Crow Tribe in its policy regarding the Yellowtail Dam. This action was taken at a scheduled meeting in Missoula, Mont., April 29, 1954.

FREDA BEAZLEY, *Secretary.*

Thank you ever so much for the time that I have consumed.

Mr. HARRISON. I would like to ask you one question, Mr. Yellowtail. Are you for or against the dam?

Mr. YELLOWTAIL. I have been with the Department——

Mr. HARRISON. Let me just ask the question.

Mr. YELLOWTAIL. I am both. I was for it until the Bureau——

Mr. HARRISON. I just asked you a question. I think the witness can contain himself.

Are you for the project or against it?

Mr. YELLOWTAIL. I am against it now.

Mr. HARRISON. That is all.

Mr. YELLOWTAIL. You can record that for me in the record, if you please.

Mr. KRONMILLER. William Wall, one of the tribal delegates will be the next speaker, Mr. Chairman.

STATEMENT OF WILLIAM A. WALL, OFFICIAL DELEGATE, CROW INDIAN TRIBAL COUNCIL

Mr. WALL. Mr. Chairman and members of the committee, my name is William A. Wall, one of the official delegates of the Crow Indian Tribal Council.

Members of the committee: You may note at this time that as a result of a Crow Tribal Council meeting dated April 19, 1954, I was one of the three delegates selected to represent the Crow Tribe concerning the hearing on Yellowtail Dam. Therefore, I have the authority to speak to you in compliance with their wishes, through the Crow Tribal Council of the Crow Indian Tribe.

The Crow Indian Tribe was one of the parties to the treaty of Fort Laramie in 1851, the terms of which were that certain land and territory comprising 38,531,174 acres within the present continental borders of the United States was set aside for the Crow Indian Tribe for the purpose of ownership, occupancy, and possession. The said treaty of Fort Laramie has never been abrogated or modified and now is fully effective, binding, and in force.

In the treaty with the Crows in 1868, ratified July 25, 1868, the acreage set aside for the Crow Tribe for their use was greatly reduced, from 38 million acres to 8,000,409.2 acres.

The present reservation acreage is again immensely reduced, to 2½ million acres. Despite the immense reduction in acreage, the Crow Indian Reservation still remains under a treaty reservation, and the proposed Yellowtail Dam is located within the boundaries of the Crow Indian Reservation acquired by the treaties of 1851 and 1868.

The proposed Yellowtail Dam site is located in sections 18 and 19, township 6 south range 31E, Montana meridian. The dam would be constructed across the Big Horn River about three-quarters of a mile above the mouth of the Big Horn Canyon, which is 35 miles southeast of Hardin, Mont. It would extend south from the dam site along the Big Horn River bed to the vicinity of Kane, Wyo., a distance of about 72 miles. Approximately 42 miles of the length of the reservoir would lie within the exterior boundaries of the Crow Indian Reservation.

In all, 6,846.67 acres of tribal and allotted land would be required for the Yellowtail project, which is described as one having multi-purpose features among which are included flood control, irrigation, and power development.

The construction of the Yellowtail Dam would result in the irrigation of approximately 44,000 acres of land. About 21,500 acres are Indian-owned lands situated within the exterior boundaries of the Crow Indian Reservation. Hence, 49 percent of the lands to be irrigated are Indian-owned lands within the Crow Indian Reservation.

Mr. Chairman, you can readily see that both the reservoir and lands to be irrigated when the said dam is constructed will be within the exterior boundaries of the Crow Indian Reservation, which was acquired by treaty with the United States.

In *Lone Wolf* v. the *United States* (187 U. S. 553) the Supreme Court said, and I quote:

> Plenary authority over the tribal relations of the Indians has been exercised by Congress from the beginning, and the power has always been deemed a political one and not subject to be construed by the Justice Department of the Government.

In this instance Congress, having plenary power over the Indians, possesses the power to abrogate treaties made with the Indian tribes and to pass laws concerning Indians which in effect would violate treaty obligations.

When Congress, by the act of March 3, 1871 (16 Stat. 566), prohibited the further making of treaties with Indian tribes, it expressly provided, and I quote:

> That nothing herein contained shall be construed to invalidate or impair the obligation of any treaty heretofore lawfully made and ratified.

This act itself indicates that Congress would never knowingly violate an Indian treaty obligation.

Gentlemen of the committee, may I cite you an incident or two that occurred many years ago. These facts are a matter of record and can be found in volume IV, Kappler, and I further quote:

When Congress passed an act authorizing a railroad company to construct its road over the lands acquired by treaty, President Cleveland on July 7, 1886, in a veto message said:

"This bill is in the nature of a general right of way through the Indian reservation. The Indian occupants have not given their consent to it; neither have they been consulted regarding it nor is there any provision in it for securing their consent or agreement to the location or construction of railroads upon their lands.

"The bill is a new and wide departure from the general tenor of legislation affecting Indian reservations. It ignores the right of the Indians to be consulted as to the disposition of their land, opens wide the door to any railroad company to do what under the treaty covering the greater part of the reservation is reserved to the United States."

Thus it will be seen that when Congress overlooked the treaty rights of the Indians, the President of the United States stepped in to protect such action.

The Northwest Ordinance, July 13, 1787 (1 Stat. 52) section III provides:

The utmost good faith shall always be observed toward the Indians; their land and property shall never be taken from them without their consent.

While Congress has refrained, with 1 or 2 exceptions, from invading or violating the Northwest Ordinance of 1787 and the act of Congress approved March 3, 1871, supra, several attempts have been made by executive officers to take Indian treaty lands without the consent of the Indians.

A case of this kind occurred when the Winnebago Indian Reservation in Dakota was thrown open to settlement by Executive order issued by the President of the United States on February 27, 1885. President Cleveland in reversing such order said. I quote:

Said order is illegal and in violation of the sundry treaties with the Indians * * *. In order to maintain inviolate the solemn pledges and plighted faith of the Government as given in the treaties in question, and for the purpose of properly protecting the interests of the Indian tribes as well as of the United States, I declare and proclaim the said Executive order of February 27, 1885 to be contravention of the treaty obligation of the United States with the Sioux Tribe of Indians and therefore inoperative and of no effect.

Gentlemen of the committee, I contend that taking Indian lands without the owners' consent is in violation of treaty obligations. Hence, applying the condemnation proceedings on the proposed Yellowtail Dam automatically involves the taking of lands without the owners' consent, whereas the Northwest Ordinance of 1787 strictly prohibits such action.

May I insert for the record parts of the report made by Solicitor Masten G. White dated October 27, 1952.

The act of Congress June 4, 1920 (41 Stat. 751–753) states that:

No additional irrigation system shall be established or constructed by the Government for the irrigation of Indian lands on the Crow Indian Reservation until the consent of the tribal council thereto has been duly obtained.

This prohibition was reported in virtually identical terms when section 8 of the 1920 act was amended by the act of Congress dated

May 26, 1926 (44 Stat. 658–660). Moreover, an even broader prohibition of a similar character was enacted in section 9 of the act of June 28, 1946 (60 Stat. 333–336), which provides in part as follows:

> No further construction work on the Crow Indians Reservation shall be undertaken by the United States without the prior consent of (1) the Crow Tribe (2) the irrigation district or districts affected, and (3) the Congress of the United States * * *. The consent of the Crow Tribe shall be obtained by a majority vote of the general council of the tribe expressed at a duly convened meeting.

It will be noted that prohibitions contained in these statutes are sufficiently broad in scope to cover the construction of the proposed Yellowtail project. The prohibition in the 1920 act, as amended by the 1926 act, is upon the construction of any "additional irrigation system for the irrigation of Indian lands on the Crow Reservation" (approximately 29 percent of the land to be served by the Yellowtail project would be "Indian lands on the Crow Reservation"); and the prohibition upon the "further construction work on the Crow Reservation by the United States" (The Yellowtail dam would be constructed "on the Crow Reservation * * * by the United States").

> In its essence, a condemnation involves the taking of the land against the will of the owner, or irrespective of the owner's consent. Since any further irrigation developments on the Crow Reservation are contingent, under present law, upon securing the consent of the Crow Indians, it is my opinion that the tribal lands needed for the Yellowtail Dam and Reservoir site cannot be acquired by means of condemnation proceedings.

Apparently Solicitor White based his facts on existing laws of the land and I feel his statement is of the highest character and should be respected by this committee.

May I express at this time the sentiment of my tribe, the Crow Indians. On February 16, and February 23, 1951, and May 8, 1953, the Crow Tribal Council passed a resolution supporting for 23d day of February and May 8, 1953, whereby it rejected offers of $1½ million by the United States.

The latest Crow Tribal Council action relative to the offer made by the Bureau of Reclamation was made on December 28, 1953, in the presence of Kenneth F. Vernon, Paul Fickinger, and several other representatives of the Government, that the said council rejected another similar offer of $1½ million. The reason for the tribal action is the fact that in dividing 3,442, which is the present roll of the Crow Tribe, into $1,500,000 the answer is approximately $438. This amount is the individual share of the Crow Tribe. I consider this amount is very much inadequate. I personally consider this is a business transaction between the Crow Tribe of the United States. The Crow Tribe is the owner of the property; consequently, the said tribe should have the full authority in the execution of the so-called transaction and not by means of condemnation proceedings.

From here on is a little bit about my personal history.

During World War II, I fought, as a private in the Infantry (Company I, 361st Regiment, 91st Division) against the famous Herman Goering's Panther Division. I received the Purple Heart and Silver Star. Now, members of the committee, I feel very deeply at this time that upon sacrificing my own life for my country, the United States—in fact, I am now crippled for life—I'm entitled to a certain amount of

free speech, and to exercise my rights, and that right is in the existing laws and treaty rights made with the United States herein set forth.

Insofar as my tribe (the Crows) is concerned, the Crow Indian Tribe have been fighting side by side with the United States soldiers, with Gen. George Custer against the Sioux Tribe, World War I, World War II, and the Korean war. When we (the Crows) shed our American blood for the sake of United States during all these wars, I feel it is no more than right that we should be given a fair play rather than by force.

Gentlemen of the committee, for the reasons herein set forth, I ask you to examine the foregoing statement carefully, and treat my people—the original Americans—as humans.

I thank you each and every one of the committee for your kind attention.

Mr. HARRISON. Thank you, Mr. Wall.

Mr. KRONMILLER. The next speaker will be Mr. John Hill, another member of the tribal council delegation of the Crow Tribe.

Mr. HARRISON. And if he does not finish by 5, he may put the rest of his talk in the record if he wants to.

It will appear as if he had given it in person.

Mr. KRONMILLER. It is quite short.

STATEMENT OF JOHN HILL, DELEGATE, CROW INDIAN TRIBAL COUNCIL

Mr. HILL. Mr. Chairman and members of the committee, my name is John Hill, official delegate of the Crow Indian Tribal Council, Crow Indian Reservation, Mont. My occupation is tribal clerk.

No doubt all of you are very familiar with the Yellowtail Dam controversy. Today I would like to bring forth some of the effects that the dam will have on the Crow Indian Reservation if and when it is built.

1. We, the Crow people, will be the ones that will be affected.
2. It will affect our treaty lands.
3. It will affect our wildlife refuge.
4. It will affect our meat basket, for every fall of the year there is approximately 165 to 200 head of buffalo killed and butchered for the meat supply of the Crow people. The meat amounts to from 215,500 to 260,000 pounds.
5. Not only buffalo meat do we get out of our wildlife refuge, but we also have ample elk and deer.

The Reclamation Bureau has offered the Crow Tribe the sum of $1½ million for the purchase of the dam site and the taking area on the tribal lands. This sounds like big money, but break it down for distribution to the present rolls of the Crow Tribe of approximately 3,422 members, and each Crow will receive approximately $437.

We realize that we are going to be deprived of our meat basket for such a small sum of money. If the dam site goes, our meat supply goes along with it also.

We are here today before the committee of Congress to present the wishes, desires, and decisions of the Crow Tribe of Indians of Montana and express our confidence that the Congress of the United States will give us full consideration.

In my conclusion, Mr. Chairman and members of the committee, I would like to leave in the minds of everyone present that we are dealing with sacred treaty lands of the Crow Indian Reservation.

Thank you.

Mr. KRONMILLER. Mr. Chairman, we wish to thank the committee for listening to us and hearing our statements.

Mr. D'EWART. I move the adoption of the following resolution, Mr. Chairman.

(The resolution referred to follows:)

RESOLUTION

Whereas the Bureau of the Budget, the Department of the Interior, and the House Appropriations Committee have indicated their wish that there be a review of the major units of the Missouri Basin project, authorized under the 1944 Flood Control Act, before construction is initiated;

Whereas the Yellowtail unit and the Hardin unit are integrated and authorized parts of the Missouri Basin project;

Whereas hearings were held April 29 and 30, 1954, before the House Subcommittee on Irrigation and Reclamation, and the economic and engineering feasibility of the Yellowtail and Hardin units were found to be adequate and sound; and

Whereas the hearings established the fact that the following desired the construction of the projects:

Frank M. Clinton, regional director, Bureau of Reclamation, Billings, Mont.; accompanied by John R. Walker, regional power manager, Bureau of Reclamation, Billings, Mont.

Colin Raff, executive assistant, the Montana Power Co., Butte, Mont.

H. W. Bunston, Billings, Mont.

L. Roy Cool, district agriculturalist, Holly Sugar Corp., Hardin, Mont.

Henry S. Ruegamer, president, Bighorn County Chamber of Commerce, Hardin, Mont.

George Hogan, Jr., member of the Crow Tribe of Indians, State of Montana.

J. Carter Johnson, chairman of the water resources and Yellowtail Dam committee of the Billings Chamber of Commerce.

Herbert L. Buck, secretary-manager, Billings Chamber of Commerce, and secretary-treasurer, National Reclamation Association.

Fred Buck, Yellowstone River Compact Commisson.

Frank Stermitz, chairman, Yellowstone River Compact Commission.

State Board of Montana, State water conservation board, Helena, Mont.

Buffalo Rapids project, Montana.

Hysham Water Users Association, Hysham, Mont.

President, Tongue River Water Users Association, Broadus, Mont.

Glendive Chamber of Commerce, Glendive, Mont.

Board of Control, Lower Yellowstone project, Sidney, Mont.

Montana-North Dakota Beet Growers Association, Montana.

Sidney Chamber of Commerce, Sidney, Mont.

Sheridan Chamber of Commerce, Sheridan, Wyo.

Laurel Commercial Club, Laurel, Mont.

George Lackmann, president, Montana State Rural Electric Cooperative Association, Inc., Montana.

Wyrulec Company REA, Lingle, Wyo.

Sheridan-Johnson Rural Electrification Association, Tri-County Electric Association, Inc., Sundance, Wyo.

Niobrara Electric Association, Inc., Lusk, Wyo.

Mid-Yellowstone Electric Cooperative, Hysham, Mont.

REA Park Electric Cooperative, Livingston, Mont.

Fergus Electric Cooperative, Lewistown, Mont.

Yellowstone Valley Electric Cooperative, Huntley, Mont.

Merrill E. Shoup, president, Holly Sugar Corp., Colorado Springs, Colo.

Whereas opposition to the project is composed of a minority of the Crow Indians on whose reservation the units will be partially located,

Whereas products raised on the irrigation projects will be principally hay, sugar beets, and feed grains, which will not contribute to the surplus foods, and

Whereas witnesses testified that there will be a market within the service area of the Yellowtail unit for all electricity to be generated at a rate that will pay out the unit with interest in less than 50 years and provide a surplus for application to irrigation costs: Now, therefore, be it

Resolved, That this Subcommittee on Irrigation and Reclamation requests the House Committee on Interior and Insular Affairs to recommend that the Yellowtail and Hardin units of the Missouri Basin project be immediately programed for construction.

In transmitting this resolution the Subcommittee on Irrigation and Reclamation would like to make the following suggestions:

1. Witnesses for the Bureau of Reclamation testified that storage was to be provided in the Yellowtail Reservoir for a flood that could be expected to occur only once in 30 years. With 2 major storage reservoirs on the river it appears that these reservoirs could be so regulated as to meet the threat of flood once in 30 years thereby saving about $4 million in the construction cost of the reservoir.

2. The Bureau of Reclamation proposes to construct a transmission line to Lovell, Wyo., a distance of 200 miles to obtain power for construction of the project. It appears that tie-ins with existing transmission lines could be made at Hardin or Billings, a distance of 40 miles, thereby making a substantial savings in construction costs.

3. Bureau of Reclamation estimate includes $24,500,000 for transmission-line construction. The possibility of tieing-in to existing transmission lines at Hardin or Billings under a wheeling agreement should be explored. Such tie-ins might result in substantial savings construction costs. Possibility of the Rural Electric Association or private power company installing the generating, switchyard and transmission facilities should be explored, thus saving the advance of a substantial amount from the Federal Treasury.

4. The Bureau of Reclamation plans for the Yellowtail unit include pumps to lift water from the river below the powerplant into the Hardin Canal after the water has gone through the generators. The committee is not convinced that the income from the additional power generated by this use of water will equal the additional irrigation cost and suggests further study to determine whether or not a gravity canal out of the reservoir would not, over a period of 50 years, result in less cost.

5. The Hardin project cost estimate contains $2,436,000 for construction of drains. The necessity of this item is questioned. The area to be irrigated is on a sloping bench underlaid with gravel. A cost of over $50 per acre under these circumstances seems unwarranted.

6. This committee has long been of the opinion that title to reservoir sites should be obtained before construction is initiated. This is especially important in the construction of the Yellowtail unit as the chairman of the Crow Tribal Council testified that a suit would be brought to block the construction of the unit. It is therefore recommended that immediate steps be taken to reach a settlement with the Crow Tribe in accordance with the opinion of Interior Department Solicitor Clarence Davis dated February 3, 1954, and in accord with the letter of Fred Aandahl, Assistant Secretary of the Interior, dated January 6, 1954, both of which are a part of the record.

Mr. HARRISON. It will be accepted without objection.

The committee will now stand adjourned.

(Whereupon, at 4:55 p. m., the hearing was recessed.)

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